UNITED STATES DEPARTMENT OF STATE

BUREAU OF OVERSEAS BUILDINGS OPERATIONS

INDUSTRY ADVISORY PANEL

HARRY S. TRUMAN BUILDING

WASHINGTON, D.C.

HELD ON

THURSDAY, OCTOBER 14, 2010

FROM

9:40 A.M. TO 3:20 P.M.

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P R O C E E D I N G S

MR. STALLMAN: -- able to check your phones, et cetera, out at the reception desk. If we have an emergency in the building, the same escorts, they'll be out in the hall. The escorts, please leave through these doors. In fact, leave through these two doors at any time you leave the room and they'll escort you out of the building safely.

The priority this morning is to display your badge, your visitor badge at all times. The guards are extremely sensitive this morning because we have a large conference going on two -- one corridor up and it's -- there tends to be a lot of concern about people being accounted for. So please, please have your badge visible at all times.

When you do leave the room, again, our folks

out in the hall will escort you. So if you need to go the restroom or you want to go over for some coffee or whatever, you know, we'll be happy to make sure you get to your destination and back.

If you have any questions, you can ask the escorts. If we can assist you, we will.

Finally or next to the last, we will have some instructions for the lunch hour which should be around noon. So we'll -- I'll come back and give you a little direction about how we're going to handle that.

And, finally, for the panel members, I was asked if you, whenever you speak, if you'd be sure you hit your microphone.

Thank you.

MR. NAMM: Okay. Thank you, Ramsay.

Yeah. Microphone buttons are right here in front of the microphone.

Well, again, welcome to the second Industry

Advisory Panel meeting for 2010. Have four new panel members I'm pleased to welcome.

First, Greg Gidez representing the Design Build Institute of America.

Glad to have you.

Greg is the corporate director for pre-construction services for Hensel Phelps Construction Company.

We've got Scott Muldavin representing the Counselors of Real Estate.

Scott, welcome to you.

He is the executive director of the Green Buildings Finance Consortium and author of the book Value Beyond Cost Savings: How to Underwrite Sustainable Properties.

Kathleen Shanahan who is -- hasn't made it here yet, but she represents the Construction Industry Round Table. She's the chair and chief executive officer of WRS Compass, an environmental management

and civil construction company.

And, finally, new panel member Janet White, Janet, welcome to you, representing the AIA. Janet is principal and director of government projects for Kling Stubbins' D.C. office.

Good to have you.

Returning panel members, we've got Rod Ceasar. And I say welcome back to Rod because we were both in Sarajevo about 48 hours ago. It seems like 24 hours ago or four hours ago. I can't quite tell. I'll tell you all why we were in Sarajevo two days ago.

Rod is representing the Associated General Contractors of America. He's senior vice president of international operations of Cadell Construction Company.

Sack Johannesmeyer who looks like hasn't --

VOICE: He's on his way.

MR. NAMM: On his way. Okay. Sack

represents the Construction Owners Association of America. He's the director of design and construction at the University of Virginia.

Jim Rossberg --

VOICE: On his way.

MR. NAMM: -- on his way, okay, representing the -- and Jim is substituting for Kris Nielsen representing the American Society of Civil Engineers. He is the managing director of environmental programs at ASCE.

Stuart Sokoloff who is old and new at the same time. His second meeting, but --

VOICE: A contradiction.

MR. NAMM: A contradiction, but Stuart represents SAVE International, wasn't able to be at the last -- the April meeting. He's a Geotechnical Foundation Structures and Structure engineer and vice president of construction for SAVE International.

And then last but certainly not least,

welcome back for another term, Bill Rodgers, from the International Facility Management Association. Bill is president and CEO for Good Cents Holdings, Inc., a leading North American company specializing in smart grid solutions, energy efficient programs, and extensive research and data analysis.

Bill, glad to have you for another year from an organization that's very important to the IAP, everybody is, but with our extra emphasis on facilities management and trying to keep the new buildings that we build running well. And it's good to have IFMA on the panel.

I want to welcome the audience. And we've got two former panel member in the audience, Mary Anderson whom I saw earlier. Where's Mary? There she is. And is Barbara Nadel here?

VOICE: She's on the way.

MR. NAMM: Barbara Nadel also on the way -- are they all in a cab together -- will be here shortly

from the -- representing the AIA.

Jane Loeffler is here and will be speaking in a few minutes to us.

Is Jennifer Duncan here from Friends of Art and Preservations and Embassy? Christy is about to tell me on the way. Many repeat attendees.

Let me introduce our side, the OBO side. To my right, Jay Hicks, our managing director for Planning and Real Estate; Marcus Hebert who's sitting in for Joe Toussaint. Marcus is the office director for the Office of Project Development and Coordination. Joe Toussaint, his boss, is the managing director of OBO for program development coordination and support.

Lydia Muniz, our deputy director, is -- what is she, Christy? On the way.

Jurg Hochuli, our Deputy Director for Research Management.

Going further to my left, Rod Evans is our

Managing Director for Construction Facilities and Security Nanagement.

And new to the IAP, Leo Hession (phonetic), who is our Managing Director for Operations. Operations runs everything from area management, which is the group of Foreign Service desk officers, if you will, that work in OBO, and communicate back and forth with posts.

Leo also runs the Office of Fire Protection, whom we'll be hearing about from -- hearing from with a presentation at the end of the day, the Office of Safety Health and Environmental Management, Art in Embassies, and Residential Design and Cultural Heritage.

So introductions having been done, I'll go back to Sarajevo. I was in Sarajevo two days ago where the secretary, Secretary Clinton, dedicated the new embassy compound there which is a Cadell Construction project, which is why Rod was there as

well.

Sarajevo is the 73rd, 73rd diplomatic facility, new facility that OBO has completed since 1999. Why 1999? That followed the east Africa bombings, the bombings of our embassies in Nairobi and Dar es Salaam in 1998.

1999 saw passage of the Secure Embassy Construction Counter Terrorism Act which led to capital security cost sharing which is the pot of money with which we build new embassies. And we're pleased to continue to be funded for construction and we continue to build. And number 73 in the past decade ain't bad. And we keep going and we keep going with contract awards that were just made at the end of fiscal year '10, i.e. two weeks ago. And we awarded -- oh, let me start from smallest to biggest. It looks like this is how they've given them to me.

Malabo, Equatorial Guinea, a new embassy compound there. It's a $53.6 million contract awarded

to Cadell, scheduled completion in 2012.

We awarded two weeks ago Santo Domingo, Dominican Republic, which is also a new embassy compound, a $148.8 million contract, also awarded to Cadell, scheduled completion of 2013.

Kabul, Afghanistan, an addition to our chancery building and some additional housing. That is a $511 million contract, $511 million, also awarded to Cadell. I'm sounding like a broken record here, scheduled completion in 2014.

Rod, congrats on your company winning all of those projects.

I should say we have an existing project going on in Kabul, a company called ECCI. It's a joint venture with Tepe-Maytag JV of Virginia Beach is building a office building annex also on our compound on Kabul and additional housing.

And then, finally, we awarded two weeks ago a new embassy compound project for Islamabad,

Pakistan, $699 million contract which was awarded to BL Harbert of Birmingham, Alabama. That's near and dear to my heart because my last overseas post was Islamabad. I was the management counselor there from 2004 to 2005. And an older compound with buildings in need of a lot of maintenance and we're doing the maintenance, but even better, we're going to build all new there. And given the importance of the U.S. government's relationship with Pakistan, we will be building a new chancery building and new office annex, Marine security guard quarters, perimeter wall, and other security features, of course, a support annex, and permanent housing on the existing compound that we have in Islamabad.

This project is divided into several phases, very complicated project on an active compound which will stay the active embassy compound for the duration of the project. Completion date of everything is 2016.

We're also going forward this year, FY '11, with a new office annex in Moscow. We awarded -- that is a design-bid-build project. We awarded the design portion to HOK, Hellmuth, Obata and Kassabaum, a few weeks ago now.

The office annex will be built to LEED Silver certification standards as are, by the way, all of the buildings, the new embassy compounds we're building both in FY '10 and FY '11. Starting with FY '10, LEED Silver is the standard that we are shooting for.

I'm very happy to say that although we weren't shooting for it, we got LEED Gold certification with our recently completed new embassy compound in Brazzaville. And that frankly blew me away that we get up to LEED Gold in a place like Brazzaville, but we did. And I think it's a testament to the design effort we're putting in. The contractor did a good job and we got enough points to get LEED

Gold.

Meanwhile, we continue to acquire new pieces of property around the world, Jay Hicks and his folks, so that we can continue to build. And we need land obviously to build.

We purchased land in the last few months in Paramaribo, Suriname and in The Hague, in the Netherlands. And we also consolidated parcels -- acquired some parcels in Jakarta, Indonesia which is an FY '11, '12 project where we will be building a new -- it's '11 or it's --

VOICE: '12.

MR. NAMM: '12. Thank you. With swing space in '11. That's what I'm thinking. Again, a very complicated project, an active compound. We're acquiring and fitting out swing space in FY '11 to move people off the compound. The construction contract will go in FY '12. And if all goes well, we'll have a new embassy compound in Jakarta in 2015.

We moved in or are supposed to have moved in to the Annona annex in Jerusalem, in west Jerusalem which is a new building which will house a consular and a couple of other offices, consular section mainly.

We got a couple of other awards. In addition to LEED Gold, we got a merit AIA award, from the California chapter Merit Award for Architecture for our embassy in Beijing, our new building in Beijing, which is the third design award for that embassy. We're proud about that.

And, finally, the Design Build Institute will recognize our new embassy compound in Khartoum, Sudan with its 2010 National Design Build Institute Award at its annual conference this month. That was a BL Harbert International and Page, Southerland Page project. Harbert was the construction firm, Page Sutherland Page the design firm. They will receive the award with Department of State identified as the

owner.

So a lot going on. We continue our design excellence. We've talked about that here before, initiative. Lydia is running that. When she comes in, I'll ask her to say a few words about design excellence. We don't have conclusions yet.

I said before we wouldn't have anything until -- it's either going to be the end of this year, more likely beginning -- first few months of 2011. We will certainly report on the results of -- the conclusions of the design excellence review at the next IAP in April of 2011.

So here we are at 9:55 and I'd like to call Jane Loeffler up.

Jane.

And Jane is going to say a few things about her revised second edition of the Architecture of Diplomacy: Building America's Embassies.

Jane, very happy to have you. And congrats

on the new edition. Why don't you sit here. Yeah, please. And here's a microphone.

MS. LOEFFLER: Okay. Excellent. Thank you.

It's a privilege to be here today. Let me know if you can't hear me. I'm happy to be here.

What's happened in the past 12, 13 years to make it necessary or possible for me to write a revised edition to the original book -- this is the new edition of the book that's coming out in a couple weeks.

A good way of trying to figure out why I would write a book, why I would expand and revise the book so soon is be -- to think back to 1998 when the first edition came out and what was going on then, and you've already alluded to some of that, but thinking back to the last chapter of the first book was called Targets for Terror. And at that time, it wasn't clear what was going to happen, but we certainly didn't expect what did happen.

The Inman Program was underway, but in a sluggish way. The -- it had not -- we had new embassies built in places like Lima and Santiago to so-called Inman standards, but not at all at the pace with the recommendations from Admiral Inman's report to redo embassies all over the world and start a huge worldwide construction program.

We were trying to find suitable real estate in the former Soviet Republic to open an array of new embassies and those sites were usually in hotels or apartment buildings or other existing infrastructure so that they certainly didn't meet the new Inman standards either.

So when -- and Congress wasn't really behind it. They'd lost the steam. They'd lost the enthusiasm for the program that they had tried to back after the bombings in Beirut in 1983.

So when terrorist struck simultaneously at the embassies in Nairobi and Dar es Salaam, the

program was really stalled. The building program was in a stall and everything changed almost overnight at that time.

And the point of the book, the revised edition of the book is to try to document that type of change that's gone on in the last 12 years and to include -- I included 35 new photos of recent work, OBO projects. And there's also a table listing all of the recent OBO projects and the names of the architecture firms that were responsible for those projects.

It certainly was a challenge for me to condense everything that happened since 1998 into a chapter or two chapters as it turns out, but it's important to try and bring this material to the public and to -- also to give OBO its own history because, otherwise, it would be really lost.

And some of the topics that are included in this new book are the failure -- the reason for the

failure of the Inman Program, the arrival of General Williams, the departure of General Williams, the creation of OBO from FBO, and a shift in planning and production priorities at that time.

The demise of the influential Architectural Advisory Panel, the once influential Architectural Advisory Panel, much lamented by all of the architects involved in that program and others, too, who recognize the importance of having design oversight in the building program, the development of the SED and an analysis of its ramifications in terms of outreach and embassy accessibility, an explanation of the shift to design build and how that shaped the building program, evolution of the green initiative already alluded to today, and, finally, the recent introduction of a design excellence agenda intended to improve architectural and engineering quality and promote sustainability.

There's also a focus on some exceptions to

the SED Program including Berlin, Beijing, and the new project for London.

I've also included a discussion of the Register of Culturally Significant Properties that was created since 1998, so that's new, too, and the renewed appreciation for mid-century modern architecture that has caused us to rethink the value or at least the reuse of U.S. embassies that were built in the '50s and also into the '60s in places like the Hague and in London.

We have control over the sites once we sell them, but the people in the host capital have a lot of control over what happens to these buildings and they despised, for example, the embassy in The Hague when it was built. And they still don't like it there at all, but they want to keep it now. Suddenly it's become very, very important to keep a Breuer building and they want to find a way to reuse it.

So things like that are a part of the story.

A couple of additional things I want to mention as to this project itself. One, whenever I speak to State Department employees about my work, I'm surprised at the outpouring of appreciation.

And I spoke several weeks ago in Beijing at the U.S. -- new embassy in Beijing. And staff members made a point of thanking me for calling attention to the ramifications of the fortress approach to embassy architecture and while at the same time pointing out OBO's tremendous accomplishments.

And it is gratifying to have that kind of outpouring from the staff itself working at the embassies.

Two, there's a new edition of the book that's come out in Chinese and I brought that along as a novelty item for Adam.

MR. NAMM: You're not going to read aloud from that one?

(Laughter.)

MS. LOEFFLER: I -- and the reason it's so interesting is that we don't know what it says.

(Laughter.)

MS. LOEFFLER: The -- a lot of the first edition of the book was about the metaphor of American modernist architecture as a symbol of openness and optimism of American democracy. And it comes up as a theme over and over again in the book.

And while it's interesting to think about what this says -- and I was in Beijing a couple weeks ago and I met the translator. And he is the head of the Embassy Building Program for China. And he found my book on the internet. He liked it. He started reading it. He had some trouble with it. He got a dictionary out and started translating it. And then he decided to translate the whole book himself. And that's how it turns out that it was published in China.

And there is great interest in it in China

which makes us think about why everybody is so interested in the history of our building program. And I find that very fascinating.

And the third point is I could never have written my book today if I -- if I started today, it couldn't have been done with the level of detail and the depth of analysis that went into the book.

I started in the early '90s or actually even before that in the early '80s, but I was actively doing the research then when access to historical documents was good and Keith Figures was still alive to give first person accounts of what happened in the post war years.

The availability of that information is tremendously curtailed now. It's just not there. Some of it has been lost and misplaced through no evil intent, but things are just not that available either from the historian's office or through OBO.

So luckily I was able to gain access I

needed to prepare this revised edition during the past two years. And that's really gratifying that it's opened up enough that I could get this material and people would talk to me and give me the material I needed and give me the pictures that I needed. And that really makes a difference. And it will be to the value of the organization to have the history, I'm sure, of itself.

So I hope that I've laid a groundwork which others can build and study in assessing the significance of this program at a time when the tension between security and the work of diplomacy has never been more apparent.

It's a privilege to write this book and to update it. And I'm grateful to Adam and to everyone in OBO who helped make it possible. Thank you.

MR. NAMM: Thank you.

(Applause.)

MR. NAMM: Okay. Let's see if there are any

questions. Any questions for Jane?

This is a great -- this is a great thing, Jane, and I appreciate you updating the book.

I can tell you the first edition of this book sits on my desk and I took it when -- shortly after I started at OBO, I took it to the beach with me to read it. And it is a -- it's not only full of information, it's a good read --

MS. LOEFFLER: Thank you.

MR. NAMM: -- with a lot of history, where we've come from, and it's by reading where we've come from that we can have a better idea of where we're going. And really pleased that you were able --

MS. LOEFFLER: Thank you.

MR. NAMM: -- to do the update.

MS. LOEFFLER: Well, I couldn't have done it without you, you personally and your staff --

MR. NAMM: Right.

MS. LOEFFLER: -- because even two, three

years ago, it was impossible. And so it really was -- we captured the moment when we could get back into it and get it done.

MR. NAMM: Yeah, yeah. Well, congratulations.

MS. LOEFFLER: Thank you.

MR. NAMM: Any questions from the panel?

And, Kathleen, welcome. Nice to --

MS. SHANAHAN: (Unintelligible.)

MR. NAMM: No. Bad day. Bad day. Yeah, yeah, yeah.

Any questions from the panel or --

MS. SHANAHAN: (Unintelligible.)

MR. NAMM: Please.

MS. SHANAHAN: I'm just curious in terms of the architecture. (Unintelligible) overseas, but sort of a national competition and understanding the safety with the fortress approach. I'm picking up on your comment about the new embassy in China. You know, is

there a --

MS. LOEFFLER: A national competition of what?

MS. SHANAHAN: For an architect to submit drawings. I mean, is it sort of the --

MS. LOEFFLER: Yes.

MS. SHANAHAN: -- badge of honor and prestige to --

MS. LOEFFLER: Yes. That was one. Beijing was a competition. And there were firms from all over the country that competed for that. And SOM was chosen to design Beijing. But those are exceptions.

The same thing was true on London. It was a national competition. It was narrowed down to, I guess, six firms. And then it was narrowed down to one. And the firm of Kieran Timberlake will design the new embassy in London.

But that's again an exception. It may turn out that there will be more in the future of -- if

there's more design bid build projects. It's not clear. It doesn't work that well with the design build model to have design competition. They don't -- I guess they don't really fit together. But certainly for very high profile embassies like London and Beijing and Berlin and London the first time around, there were competitions.

MS. SHANAHAN: Uh-huh.

MS. LOEFFLER: And the competition history is something that is hard -- is important to maintain because when I was digging out information on the first competition for the London embassy, the one by Saarinen, the one we've just sold and we will move out of in a few years, there was absolutely no material to be had. It's all lost.

So it's very important to hold on to that material. It tells you a lot about the temper of the times, what design is selected, why it was selected, why others were rejected, what they were talking

about. So I think that they make a really interesting history. The history of Berlin and what designs were selected for Berlin, a very -- it makes it an important piece of OBO history.

MS. SHANAHAN: Uh-huh. Thank you.

MS. LOEFFLER: That's a good question.

MR. NAMM: And let me -- any other -- Bill, please, mike.

And I should have said the mikes are there. We have a court reporter, if you will, somebody who does the tran -- there are transcripts published of these meetings. So we need the mikes on so we can hear.

MR. MINER: Jane, we do indeed appreciate the work that you've done over the last two decades in this area.

MS. LOEFFLER: Thank you.

MR. MINER: But, you know, some of the history we wish wasn't recorded. My question is this.

Do you deal at all with the history of the Industry Advisory Panel, this group and the impact it's had on the program in the last ten years?

MS. LOEFFLER: No. I have -- that's something that remains to be done. My goal was to just lay out the fact -- the things that happened in this one chapter. I couldn't get into that level of analysis that I would have liked to have done because that would have been another book to develop the -- all of the nuances of what (unintelligible).

The planning, I did reflect some of the difference in planning and the approach of the planning and the way projects were put together. But that's something that remains for some other scholar to pick up and report or maybe I'll end up doing it, but somebody should keep track of this and the impact of the Industry Advisory Panel and also the demise of the Architectural Advisory Panel because I only could take that -- make that mention, but that is a

significant -- whether that even makes a difference, you know, how that makes a difference and whether or not architects -- AIA has always tried to represent its members by advancing the idea of architectural representation which is important.

And I think that the recent report that they did with OBO is a sign of the fact that they are trying to be part of the mix. And historically speaking, they have been the voice of the profession trying to get members back into advisory positions as they were in the AAP.

MR. MINER: Thank you very much.

MS. LOEFFLER: Thank you.

MR. NAMM: Well -- and let me say -- let me pick up on something you said, Jane, toward the beginning of your presentation. You talked about the Inman Program and how the Inman Program sputtered out.

As I understand it, and I may be at least partially wrong, Inman Program sputtered because we

didn't have sites on which to build --

MS. LOEFFLER: Yes. That was the reason.

MR. NAMM: -- which is why, and I mentioned those three sites, Paramaribo and the other two places, where we recently acquired sites, we have to in the assembly line, if you will, and I don't mean to use that crass a metaphor, but the assembly line of getting embassies built starts with getting land.

And we build, you all know, off of a, and those that don't, off a top 80 list and that's per law. We have to have the top 80 most vulnerable posts in traunches of 20 and we build off of that list.

There is an unhappy correlation between the most dangerous places or many of the most dangerous places and real difficulty, inability in some cases, to acquire sites.

And, you know, we -- Jay and his folks do a great job in pushing to get land in whether it's Syria or Libya or Pakistan, some of the more dangerous

places that are at the top of this list. And that top 80 list is fed by the Bureau of Diplomatic Security's vulnerability list. Diplomatic Security tells us where the most dangerous places are and that's where we build.

So it's -- our folks here are organized actually from your left to right down the line, down that assembly line with Jay getting the sites, Marcus and Joe developing the projects, Rod, skipping over to Rod, building the buildings, and then Leo responsible for most of the maintenance and fire safety and other things.

So as we look at that process and why the, and learning from history, why the Inman Program was successful for a while, but then died, that's a big reason. The headwaters are down at that end of the table.

Jay.

MR. HICKS: I -- just on that point, I took

something out of the play book from corporate America where I was doing a lot of this work prior to coming here. We were bringing sites in just in time and that's obviously very risky when you spend a year preparing an RFP and not knowing whether you're going to have the site come contract issuance.

That's a problem. And the budget process begins or you set the budget two years prior to the contract award. We were setting budgets based on a notional location in a city, not the actual site we were going to buy.

So when I came here, learning that that was one of the things that contributed to bringing down the Inman Program, we instead of bringing in seven sites one year just in time, I said that's great, you need to do three times that many sites next year to get ahead of the curve so that we don't run the risk of not having sites to make contract awards and to have sites in time to actually inform the budgets,

that actual site that we're going to build on.

So I'm happy to say that significant contributor to the Inman Program coming down has been fortified and certainly will not contribute to any problems with the program we're now administering.

MR. NAMM: Yes.

Jane, is there something else?

MS. LOEFFLER: No. But I did find that I did learn about the fact that that was the cause of the Inman demise. I had thought that it had other causes and most people had written about other causes of it, meaning congressional inaction and so forth.

And when it turned out that it really was the fact that there weren't sites and they couldn't come through with sites fast enough, that really was important and that's, you know, part of what I wrote about.

MR. NAMM: Yes, yes. And, again, we've done very well in the last ten years with getting sites,

building buildings. The statistic that I talk about all the time is that in the last ten years, we've put more than 22,000 U.S. government employees overseas into safer buildings, not just safer buildings, more functional buildings. Design excellence is looking how to make the buildings more functional, more attractive, et cetera.

Jay, go ahead.

MR. HICKS: I just wanted to say just -- I know we have lots of our industry partners out there, but we have, just to make it clear, we have a healthy land bank of properties. We don't want to buy too many --

MR. NAMM: Right.

MR. HICKS: -- have them sitting idle too long, but you need to have enough to ensure that the pipeline is always full. And I can tell you with confidence the pipeline is full.

And Adam amply described there seems to be a

correlation between security, which is where we prioritize where we buy and build, and the ability to get land. You know, our efforts to get those tough locations are relentless. We never stop trying to get the touch high priority locations.

But while we're doing that, we're simultaneously working our way systematically down the list to where we can score hits and bring the property in. So I'm happy to say in industry, if you're looking for vulnerabilities to what we're doing, site acquisition is not one of them.

MR. NAMM: Thank you.

MR. HICKS: Thanks.

MR. NAMM: Good. If there are no other questions, I have a little presentation to make, Jane. And this is not in Chinese.

MS. LOEFFLER: Oh, good.

MR. NAMM: This is a -- let me stand up and present this to you. This is a Bureau of Overseas

Building Operations' Recognition Award --

MS. LOEFFLER: Oh, thank you.

MR. NAMM: -- for Jane Loeffler in recognition and appreciation of your significant contributions to the Bureau of Overseas Building Operations' mission of providing more secure and more functional facilities for the conduct of U.S. diplomacy and the promotion of U.S. interests worldwide. So there's that and --

MS. LOEFFLER: Thank you.

MR. NAMM: -- I'm going to present you with our --

MS. LOEFFLER: Oh, thank you.

MR. NAMM: -- vaunted OBO coin.

MS. LOEFFLER: Oh, my goodness. Wow.

MR. NAMM: I'll let you show that off to the participants, but we really appreciate the second edition.

MS. LOEFFLER: Look, my coin.

(Applause.)

MS. LOEFFLER: Really appreciate it. This is very unexpected and I'm very touched. And I am grateful to everyone here for making this possible. And I will treasure it --

MR. NAMM: Thanks, Jane.

MS. LOEFFLER: -- treasure it. Thank you.

MR. NAMM: Okay. Great.

MS. LOEFFLER: Thank you.

MR. NAMM: Okay. We will now -- and anybody, by the way, who speaks any Chinese who would like to translate this book back into English so we know exactly what it says, we'll take offers after the program.

Let's move on to our second topic which is panel member roundtable which is something that I gather we did a few years ago and then got away from, Jonathan, right?

And I think -- I'm really glad we're getting

back to it because we're -- we have a panel to hear from the panel and we were doing the individual presentations with OBO champions and IAP champions, but I think gathering topics, gathering ideas going down the panel and hearing from nine different people is something that we will probably do now every IAP. It's a good way, I think the best way for us to hear from all of you.

So without further delay, why don't we -- let's see. I have them in order by, I guess this is by organ -- well, it's not by organization. Let's start with Rod Ceasar.

Rod is going to talk to us about LEED versus green globe building initiatives.

Let me just give you the order, so you'll know when you -- I've got Rod and I've got Scott, Sack, Kathleen, Bill Rodgers, Janet White, Stuart, Greg, and Jim in that order. Unless anybody is dying to go first, we'll keep that order.

So Rod is going to talk to us about LEED versus Green Globe building initiative.

Rod, please.

MR. CEASAR: I can tell you I'm not dying to go first --

MR. NAMM: Okay.

MR. CEASAR: -- but get it done and out of the way.

MR. NAMM: There you go.

MR. CEASAR: The question that I asked myself when we said what was a hot topic for contractors was should there be more than one rating system to show that a certain level of green design and construction has been achieved.

I think we've talked about a lot of things and you, Adam, have mentioned Gold and Silver and LEED accreditation and all that.

You know, historically, I guess over the last decade, OBO has progressed in making its

buildings green and they currently use a measuring system that was established by the U.S. Green Building Council that's known as LEED. And over time, everyone has become familiar with some of the LEED terms, Gold, Silver, Platinum, or whatever.

You can go to the next one.

And what's happened I guess in the last year or so is that some of the other government agencies have begun looking at alternatives to LEED. And I put these up here just simply to show that the major ones all have come around to using LEED in the last few years, but recently we've seen that both the Veterans Administration and the General Services Administration have begun considering another alternative to LEED which is called Green Globe.

And from a contractor's perspective, we would like to see everything one or the other. You know, we tend to keep things in real simple boxes.

You can go on.

This is a comparison and this really is what I wanted to talk about.

Adam, you mentioned earlier that Brasoville had gotten Gold and I don't think that anyone would recognize that that loosely associates with Green Globes two Globes or three Globes.

And if your RFP requirements said you can use one or the other, but we would like to achieve -- and I'm going to jump back because you said all the -- everything from FY '10 on is going to be Silver. You can see the percentages. The points don't match the number of Globes. The percentages don't quite match each other.

So in the case of a job that -- assume your RFP, for example, would list that you could achieve either Silver or two Globes. They don't quite compare.

And so from a contractor's perspective, we would like to see one or the other.

MR. NAMM: Right. Percentages are percentage of possible things that could be green?

MR. CEASAR: Well, in the case of Green Globes, they have narrowed it down to a percentage. They have a thousand points that you can get and they eliminate the ones that a project can't get. So they kind of simplify it.

And at the end of the day, you get in the case of one Globe 35 to 54 percent of your achievable goals. And that loosely matches LEED certified. And when I say loosely, and this is where the problem comes, if your RFP were to require or consider either one, and let's just say, for example, that under Green Globe you got 54 percent, you would still be only, only one Globe which in my mind is the least.

But if you look over at Silver, you would be achieving or LEED certification, you would be achieving Silver which generally is recognized as better than certified.

MR. NAMM: Right.

MR. CEASAR: So you can see when you start comparing the two -- and I put percentages on the LEED numbers simply because there was no other way to compare one Globe or two Globes with certified or Silver.

Now, that's not to say that there are not advantages to another system other than LEED. The advantages that I saw to Green Globe were that the submissions are simpler. It does offer a credible alternative to LEED that may be more suitable in certain countries. It's not a one size fits all kind of a thing.

It does work very well for existing buildings and I think my personal opinion was that it probably worked better for existing buildings than LEED. And its advantage is that it eliminates those points that are not achievable in a particular location.

They start off with a thousand points and you eliminate the ones that you simply cannot get in a certain country, for example, or location in the United States.

The disadvantages that I saw it is currently only used in Canada and the United States which is almost totally against the whole State Department building program. I don't believe you do anything in the United States. I may be wrong about that. But Canada, certainly you do, but it goes against where your operating locations are.

At the moment, there -- it's a fairly new thing, so there are very few accredited people as opposed to LEED where, and probably in this room, there are quite a few LEED people that have gone through the process.

OBO, the designers, and the contractors are not going to be familiar with this rating system. And my purpose here really is to make you aware that there

is something else out there so that when you hear someone talk about Green Globes, you understand what it is that you're looking at.

But I got to say that if I said a job had achieved two Globes or three Globes or four Globes, there probably are very few people that would know what I was talking about.

MR. NAMM: Yeah.

MR. CEASAR: When you mention a project achieving Gold or that your FY '10 projects need to be Silver, I believe most people in here recognize that that was a certain level of achievement with green -- your Green Building Program.

MR. NAMM: Right. Yeah. I have to say I saw it in the notes this morning. I hadn't heard of Green Globes before. I had heard of BREEAM which is the British system.

I'm looking back at Bill and the other green folks. Have -- you've heard of Green Globes, Bill?

MR. MINER: Yes, but not as familiar.

MS. BERKEMEYER: (Unintelligible.)

MR. NAMM: Okay. Mike, Melanie, please.

MS. BERKEMEYER: They're using Green Globe domestically here at State --

MR. NAMM: I see.

MS. BERKEMEYER: -- as well as LEED, uh-huh.

MR. NAMM: Okay. Okay.

MR. CEASAR: And the last thing here, the rating system itself is not as widely recognized. If you ask anyone to go in and try to use their system, there obviously is a learning curve involved with that.

MR. NAMM: Yes.

MR. CEASAR: Chris, you can go on to the next one.

Now, this one, this is interesting because we compared, and the evaluated buildings were given me -- given to me by the Green Globe organization, and

you can see with the exception of the Clinton Presidential Center, which was a fairly large project in the Alberici headquarters, which was a very large project, most of these were fairly small, and what I tried to do was to compare the two rating systems.

And I put them in order because you can see if you are using the terms that you used earlier about Silver, none of their projects are gold, but they did get one that was Platinum, you can see when you try to compare it that under the LEED system, five of their projects that are listed here would have gotten LEED Silver, but you would have gotten everything from two Globes to three Globes under a separate rating system.

MR. NAMM: Right.

MR. CEASAR: So immediately if I had a choice in the contract -- and I got to be frank. As a contractor, we're going to go to the lowest thing we can find there. And that's not necessarily what the government is looking for. You're looking for perhaps

the highest thing.

You know, it's fairly easy when you get up on the very high end, the four Globes award and the Platinum award for the Alberici headquarters and then on the very low end, I don't even have something up there that was one Globe, but LEED certified is the lowest that LEED has.

And you can see that particular project would have been LEED certified, but it would have also gotten two Globes under this other rating system.

MR. NAMM: Right.

MR. CEASAR: And a project that got on the low end of the LEED Silver would have gotten three Globes which is the third highest thing you could get under the Green Globe Award system.

You can go to the next one.

So then this comes back to the original question. Should there be more than one rating system? And what I'd like you all to be aware of is

that there are more than one rating system and you're going to hear from time to time, particularly with some of the other government agencies looking at Green Globes, you're going to begin to hear those terms more often.

And from our perspective, we would like only one and that's really what this is about. We don't really have a preference for LEED or Green Globes, but what we would prefer is that should you ever consider another alternative, that you only pick one.

MR. NAMM: Okay. Great. Thank you very much. And let me say -- and that was a perfect length, Rod. Thank you.

I divided this out. We've got an hour and 45 minutes to get through seven at least. Maybe the eighth and ninth folks will get here, but -- which leaves about a five, six minute presentation which yours was and then we can have some questions.

And I open it up for a few minutes of

questions or comments.

Please.

VOICE: Isn't -- my understanding about the issue between Green Globes and LEED has -- the reason that Green Globes is easier to submit is that the documentation requirements and verification of whether you've actually achieved what you stated is at a higher level in LEED which is part of the reason why it's been selected.

Do you have a comment on that? And as a contractor, I might think that you would actually like Green Globes better because the verification documentation is easier.

MR. CEASAR: Well, to give you a very short answer -- first of all, I brought Mary Angela Alegra (phonetic) with me. Mary Angela works for Cadell and she is far more up to speed on this.

But I got to tell you that when I looked at this, the Green Globes system was far simpler to get

up to speed with. And I did see a lot of advantages to it, particularly in some of your existing facilities and perhaps renovations where you're looking to achieve a nationally recognized system where you can say that your buildings are green. The Globe -- the Green Globes system probably would be far better for that.

MR. NAMM: When was Green Globes founded, inaugurated? Do you know, Rod?

MR. CEASAR: Actually, I don't know.

VOICE: And who owns it?

MR. NAMM: How long has it been around, Scott?

MR. MULDAVIN: About a couple years after LEED. Probably 2001, 2002. It was also acquired by Jones Lang LaSalle, at least part of the system, for them to use internally about two years ago.

MR. NAMM: Right.

MR. MULDAVIN: And the development of Green

Globes in Canada has been somewhat independent and it's a little bit more prominent, particularly in existing buildings in Canada.

MR. NAMM: Right, right.

Bill.

And Bill, by the way, is our office director, director of the Office of Design and Engineering which runs the Green Program for OBO.

Bill.

MR. MINER: And we have the whole green team here.

MR. NAMM: And you have the whole green team there.

MR. MINER: The bullpen is over here, so -- now, the question was, who owns and operates it. And I think you just answered that. Was that -- did that come out of Rocky Mountain Institute? Was that the source of it?

MR. MULDAVIN: No.

MR. MINER: So who manages it today? Who's the equivalent to the U.S. Green Building Council?

MR. MULDAVIN: (Unintelligible) name of the person. He used to be with LEED.

VOICE: Green Building Alliance, Green Alliance.

MR. MULDAVIN: Green Alliance?

MR. MINER: Green Building Alliance. Okay.

MR. NAMM: Green Building Alliance. And it's interesting to me. I did not know that -- Melanie Berkemeyer from Bill's office is saying that domestically another State Department bureau, the Bureau of Administration, which is responsible for domestic facilities, is evidently using Green Globes as its stan -- are they also using LEED, Melanie? Are they doing both? Yes.

MS. BERKEMEYER: Yes.

MR. NAMM: Okay. Okay. Interesting.

MR. MULDAVIN: I do have the contact

information if anybody wants to know further about it and --

MR. NAMM: Please. If you could pass that to Bill when we break.

MR. MINER: I can assure you today we have no effort to adopt Green Globe. We're heavily invested in LEED. Way back in the development of the standard embassy design years ago, we built into it a certain number of LEED points so that when we got to today, we'd have projects that were LEED certifiable. So it would take a lot of effort for us to sort of steer to another rating system.

I'd like to get to a day where we don't even need a rating system and it just becomes part of good engineering.

MR. NAMM: Yes.

Donna.

MS. MCINTIRE: I will say --

MR. NAMM: Tell them who you are.

MS. MCINTIRE: Yeah. Donna McIntire (phonetic). I've been involved with the green team for a long time. I'm just coming back from a United Nations experience.

Just to give you an international perspective, though, and I think this is a representative of the London Embassy where you're getting BREEAM rating as well as LEED, in certain countries that have a well-established rating system of their own such as Green Star and these other programs, we may consider actually getting a rating of the one in the country so that it's relevant for the people of that country.

So I think that might be a direction that might be helpful. So the London one is doing that.

MR. NAMM: Okay. All right. Last comment.

Scott, anything else?

MR. MULDAVIN: Just the direction relative to all these certifications because they're

prescriptive in nature towards actual performance. And so what you get right in the beginning is fine. But what you really want to know is a year or two later how is the building actually performing.

MR. NAMM: Yeah.

MR. MULDAVIN: And I would say that should be the focus.

MR. NAMM: Okay, which is an interesting segue to Janet's presentation on ESPCs and how you calculate performance. So we'll get to that.

Thank you, Rod.

Let's move -- next Scott is going to talk to us about zero net energy initiatives.

MR. MULDAVIN: Yeah. When I was asked to think about a topic, I think there's obviously a million things to talk about, but I'm an advisor to the Zero Net Energy Commercial Building Consortium, their Finance and Evaluation Committee.

So I thought I would talk about it because

there's a lot of things coming out of the work that might be of interest.

First of all, we can go to the next slide.

What is a zero net energy building? You hear that term all the time. And Congress defines a zero net energy commercial building to mean a high performance commercial building that is designed, constructed, and operated, and I think the third bullet point is the most important, in a manner that will result in no net emissions of greenhouse gases.

Go to the next slide.

Also it's important, I think, to think about net zero site energy which produces at least as much energy as it uses in a year when accounted for at the site and then source energy which takes into consideration where the energy is actually producing the loss of electricity.

Next slide, please.

Other factors that get confused in the

definition of net zero energy is this one about economics. If you define it as it has to be economically feasible, that's an interesting thing.

Also peak electrical demand and load shape can affect the definition as well as embodied energy. About 15 percent of the direct -- of the energy that you would use throughout the life of the building is actually included in the materials and thinking about that.

Water consumption uses about 20 percent of the energy. So there's a lot of other -- maybe an NZE Ready Buildings is a really interesting concept in that a lot of the technologies and things aren't quite there, particularly from a risk return basis.

But there are a lot of people working to develop buildings that will be ready to take on the new technology as -- so it's something to think about in advance.

Next slide.

One of the things that I found interesting, people throw out the zero net energy term all the time, but as of today -- there was a study done in 2007 which is still cited mostly today as being the best, but 47 percent of buildings at least in the U.S. by floor area ratio could reach zero net energy using the best known technology and practices.

I thought the next one about new buildings, new buildings could consume 86 percent less than the existing stock. And then the final one that on average for existing buildings, only 43 percent energy savings could be based on best technology and practices.

So trying to give -- the term is thrown around a lot, but really what can be achieved realistically today.

These are just another way to think about it and show you the differences for the type of properties.

Energy reduction is required to enable a net zero energy from photovoltaic power whereas offices because of their density and a lack of roof space in particular, they would -- you'd have to have 67 percent reduction whereas warehouses and educational facilities and other lower level buildings much more achievable.

Next slide, please. I'm going to go -- go to the next slide. This is a little too complicated to talk about right now.

Key factors to achieving net zero energy -- and when you use the term zero net energy, another way to say it is it's sort of a maximum energy efficiency level. The number of stories -- you can do -- you can get net zero energy with big buildings. But if they're tall and dense, you really just can't get there.

Plug-in process loads, buildings that have very significant plug loads and/or they're high

intensity use, very, very difficult to get net zero energy.

The principal building activity, that gets as to the schedule, location, depending on if you have sun and other types of attributes. Anyway, it's a variety of things that are also important to achieving that.

Next slide, please.

Just a little more history. The Energy Independence and Security Act of 2007 established the Zero Net Energy Commercial Buildings Consortium which essentially says that we need to have new commercial buildings by 2030 be zero net energy.

Next slide, please.

Other things that are involved that are going on right now as part of this commercial building initiative is the commercial building energy alliances. The Department of Energy has alliances with a lot of the big real estate related trade

groups. There's commercial building partnerships.

And this is a particularly interesting one where they're working with actual investors that over the next three to five years that are going to be building new buildings and existing buildings and DoE is a providing a group of paid best consultants in the world to come up with the best strategies on actual buildings.

The high performance buildings clearinghouse is a database. There's a summit coming up. A recently announced DoE HUD project, this is very interesting, where ten different regions in the country where universities and cities and people got together all to compete for a single $125 million award for a five-year program to deal with all the integration issues for getting zero net energy in an entire region. It's -- it was a very hotly -- hot competition. And Pittsburgh actually won, University of Pennsylvania and Carnegie Mellon and United

Technologies Company.

And another thing they did is the Zero Energy Commercial Building Consortium. That's the thing that I am on. What's interesting about this consortium is that its goal is we want to get in 20 or 30 years to zero net energy. What can we -- what we need to -- what do we need to do now and over time to get there?

And so they after a bunch of work came up with these -- sorry for the one, one, one, ones over there, those should be one through six -- came up with these 12 working groups and each working group has, I don't know, 30 or 40 people on the working group, but a team, and they are developing -- what's good about this is about ten page papers on the key issues, where the industry is today, where it's going, the obstacles and so forth.

And what I want to just make clear about it, these are available today and I don't have time to go

into all what they learned, but I learned more by reviewing these ten ten page papers about the future. And there's a tremendous amount that can be learned relative to -- for the State Department.

Next, next page, please.

Some of the things is -- what's great about these papers is they deal with the process, dealing with the process of getting from where we are today in the future under each of these areas, building envelopes or lighting controls or -- and how you do performance measurement and so forth.

Identifying the baseline challenges, it goes through in a very succinct way and deals with some of the issues before you get to security and geography and procurement and grid issues which are key to the State Department, setting realistic performance goals, technology innovation. There's just a lot in there. And rather than -- and I know I don't have the time to go through it. Just to know that it's there.

Finally, the Green Building Finance Consortium, the group that I'm involved in, there's a free book and research library dealing with a whole bunch of issues that is available on my website that people can get at some of these issues.

Thank you.

MR. NAMM: Okay. Thank you, Scott.

Questions, comments?

Bill, please.

MR. MINER: Thank you for demystifying that. It always seemed like, you know, mission impossible net zero buildings.

In our context, it's encouraging because what it says is maybe if we isolate some of the many buildings that are in our compounds, the warehouse, the Marine guard house, and try to achieve net zero energy status there, it might be the place to start rather than trying to make the entire compound achieve that level.

Does that sound like a strategy that could work for us?

MR. MULDAVIN: Yeah, absolutely. And, actually, I thought one of the particularly interesting papers -- one of the groups is a multi-building group and they talked about the particular issues dealing with net zero energy on a multi-building level dealing with (unintelligible) and a lot of the other kinds of issues that are very important.

But, yeah, certainly building by building, you could achieve it, I think.

MR. NAMM: Okay. Marcus. Is that not working? Why don't you slide over here.

MR. HEBERT: Scott --

MR. MULDAVIN: Yes.

MR. HEBERT: -- in the target or goal to have new commercial buildings to be net zero energy by 2030 --

MR. MULDAVIN: Yes.

MR. HERBET: -- are there indicators now about how many, what percentage of new commercial buildings coming on line will be net zero in the next two, three, four years?

MR. MULDAVIN: Very interesting question. I think as of eight months ago, I think there were eight zero net energy buildings in America. Okay? And there are 60 more, I think, around today that are scheduled to be completed as zero net energy buildings.

So, no, it's a very, very low number. I think, you know, there's a lot of debate about even the terminology about what it means.

MR. HERBET: Uh-huh.

MR. MULDAVIN: So I think we're many years off, but getting there. I think the number which says that given technologies that are expected in the relatively near future that you could have a building be 86 percent less energy use than existing stock is

probably the most encouraging number.

MR. NAMM: And we know from the last -- from the news stories the last couple days, we'll be getting to these buildings and cars that we're not actually driving, that are driving themselves, the Google cars.

Other questions?

Or it wasn't Google. Who was it? Who has been testing the --

VOICE: It was Google.

VOICE: Yes.

MR. NAMM: -- who's testing the cars that drive themselves? Could I call -- Janet, would you mind while we're on the energy -- on the green subject, would you mind going next?

MS. WHITE: No problem.

MR. NAMM: Okay. Let's -- then we bunch the green topics. So Christy is bringing up your --

MR. MINER: Adam, while you're making that

shift, just --

MR. NAMM: Please.

MR. MINER: -- point of information. The executive order that was just signed in the past year mandates that we -- all federal agencies start to move towards net zero energy status by what year? Anybody remember that? 2020. So it's not an option. It's something that --

MR. NAMM: Right.

MR. MINER: -- that's anticipated that that's where the federal agency will go. So defining the terms and understanding at what point you reach certain plateaus is very, very helpful for us.

MR. NAMM: Yeah. And --

MR. MINER: Please share your slides with us.

MR. NAMM: Please. Go ahead, Scott.

MR. MULDAVIN: I would just add that the sole purpose of the Zero Energy Commercial Building

Consortium is actually to develop recommendations to the Department of Energy and Congress relative to the actual implementation of these orders and the things that are already in place.

So that's another -- it's a way to look into the future as to what some of the -- the guidance that you guys might be getting even in the future on some of these issues.

MR. NAMM: Right. Okay. And our first net zero energy building we hope will be London which will be finished in 2017. And the design firm is going for both LEED Platinum and BREEAM Outstanding which is the British equivalent of LEED Platinum.

Okay. Very good. Thank you, Scott.

Okay. We'll move on to Janet who's going to talk to us about energy savings performance contracts.

Please.

MS. WHITE: Good morning.

MR. NAMM: Good morning.

MS. WHITE: I'm talking about energy savings performance contracts, ESPCs, and I'll tell you I am a strong advocate for ESPCs. And I think it fits well with the U.S. Embassy Program going greener and minimizing the global footprint.

I'm going to give you a brief background and then show you a few ESPC project examples that Kling Stubbins has done, is working with actually Honeywell International who has the ESPC contracts for the HUD building, Department of State buildings, and Complex Group GSA. Then I'm going to present some opportunities for OBO if they can use more ESPCs.

The federal -- go to the next slide. Thank you.

The federal government started using ESPCs about 12 years ago. And the commercial market has been using them for actually over 30 years. So it's not a new concept.

Basically the -- in the federal government,

ESPCs are partnerships between a federal agency and the energy service companies, they're called ESCOs, simply to improve energy efficiency and reduce energy use and costs in federal facilities.

These cost savings are actually what fund the ESPCs. There's no up front capital costs. There's no special appropriations. There's a guaranteed energy and O&M savings and the contract terms can be up to 25 years.

ESPCs use Department of Energy as a contract vehicle for their master contract between the federal agency and the ESCO.

The first thing that's done is there's a -- it's essentially called a site data package that collects the utility usage and the equipment inventory. When that's put together, the ESCO consults with the agency and then together they identify improvements to save energy.

When the ESPC is approved, the ESCO designs,

installs, maintains, manages, and finances the project.

If you look at the graphic on the right, it's a simple graphic because it's really a very simple concept. Currently energy and operation and maintenance costs are fixed for an existing building. They dictate what the costs are.

But when you have an ESPC, the energy and operation and maintenance costs go down and the money you save essentially goes to fund the ESPC Program. After the ESPC, the costs for energy and O&M, they stay down and there's continued savings.

Next slide, please.

A better look at some of the drivers of ESPC. First of all, the most executive -- the first -- the most recent executive order which was about a year ago called for by 2020 reduction in greenhouse gas, water efficiency, and petroleum for vehicle fleets.

But the history is really telling on this. The first executive order was actually 20 years ago in 1991 and the first legislative authority on energy was 35 years ago, the Energy Policy Conservation Act in 1975. So ESPCs starting 30 years ago, it fits this time line.

Another driver is the lack of capital funding which, as we know, it results in reduced operating budgets. There's also a need, a great need for more efficiencies in defining the scope of work that saves time and money and also to help bundle maintenance and ESPCs do all of that.

There's a desire to have more contracting flexibility. Examples currently used, of course, are design build partnerships and fast track projects which all accelerate the process.

Overriding all of these drivers is environmental stewardship which drives the ESPCs and our culture today.

And the current endorsers of this, if you'll go to the next slide, is by President Obama who in his inaugural address said nor can we consume the world resources without regard to effect.

And also on the next slide, an endorsement by Under Secretary for the Department of State Patrick Kennedy who's also the senior sustainability officer who called attention to responsible environmental stewardship and to improve energy efficiency.

I'm going to present quickly three buildings, three projects actually, the first being the HUD headquarters at L'Enfant Plaza. This is a ten story historic landmark building with about a million and a half square feet. Honeywell holds the ESPC contract on this.

And the energy and water savings or energy conservation measures, ECMs, include converting the steam plant, lighting upgrades, water conservation fixtures, advanced metering, window replacements.

They're replacing 1,584 windows in the building. There's a green roof and then solar power and water. The O&M savings on this includes an EMC AC system and also has 17 years of full maintenance.

There's some additional benefits into what I just mentioned. And I must tell you that I know for a fact Department of Energy is very impressed with this particular project because Honeywell is looking beyond the energy and the water savings. They're looking at the whole building envelope and that's important to note.

Ths project went through approval with the State's historic preservation because it's a landmark building. It's going for LEED certification which would be Silver and actually hopefully Gold.

And, Rod, I don't know how many Globes that computes to --

MR. CEASAR: (Unintelligible.)

(Laughter.)

MS. WHITE: Point well made.

And the goals for energy, water, greenhouse gas will be met five years early. This is single source responsibility and it's going to create over 400 jobs.

The total contract amount on this is about $40 million and it's funded as all these projects. The next two will be two biannual energy and O&M savings.

This, again, by Department of Energy's applause, this is the ESPC of the future.

The next project is -- actually, there's five buildings and it's not a project. It's a group of buildings with Department of State. The Harry S. Truman Building that we're in, this building we're sitting in has an ESPC ongoing. And then the other building is listed on the left.

The scope of work for these projects, basically there's, of course, lighting and water

conservation, constructing the boiler plants, the full-time retro commissioning agent, the energy management and control system, and advanced metering. This project is about $20 million.

And the last project is the FDA campus at White Oak. This is an ongoing campus project that's been going on for over ten years. It's three million square feet, state-of-the-art campus built by the General Services Administration.

And the scope of work similar with a little more embellishment to construct, manage, and operate the central utility plants, again commissioning, on-site co-generation, innovative controls, distribution systems, the lighting, and the rest. The contract amount on this is both for annual energy, O&M savings, and a one time ancillary savings.

I'm going to quickly to conclude this go through the ESPC process. Simply again, you select an ESCO based on qualifications. The ESCO identifies the

scope of work with the federal agencies, submits a preliminary proposal. The agency authorizes it to proceed. The ESCO submits a final proposal. There's a task order award and then after the execution, there's acceptance by the federal agency and then the ongoing maintenance and then the measurement and verification.

Again, the ESCO government partnership identifies the needs, prioritizes goals, and it makes long-term plans.

Next slide, please.

Looking ahead at the ESPC, what challenges and the kind of solutions would be with OBO. The first area is how to collect the data, how to develop those site data packages. And it is simple as it was said to begin with. The ESCO compiles the site data packages. They identify the scope of work. They do it all. It's a one stop shop.

The size of the post and the geographic

dispersion have some challenges. By bundling the post, bundling multiple posts, that is a resolution, a solution to that challenge.

Delimiting the limits on the contracting authority, again, this is a new contract vehicle, centralizing the contracting would be a solution to that.

And, lastly, the turnover of post personnel during the life of the contract is a problem because you lose your institutional memory. And so, again, centralizing the oversight at OBO and design and engineering would resolve that.

So it's OBO and design and engineering championing the ESPC functions. The post reaps the rewards.

Bringing ESPCs full circle back to environmental stewardship, over 200 years ago -- next slide, thank you -- Thomas Jefferson had this larger concept in hand saying the earth belongs to each

generation during its course and that no generation can contract debts greater than that they be paid during the course of its own existence.

I don't want to sound like I'm lobbying too hard on this, but I think the ESPC Program is inherently successful and I think OBO would benefit from having it on board.

MR. NAMM: Thank you, Janet. That's great. I hadn't heard the Jefferson quote. Very apropos.

MS. WHITE: Take it. It's yours.

MR. NAMM: Let me say OBO has done a few SPC -- ESPCs. I think you know that. But they were, let's put it -- let's -- let me say false economies in that we paid for the entire cost --

MS. WHITE: Right.

MR. NAMM: -- of the ESPCS. What we have at the Department of State is a division of financial responsibility with OBO funding buildings, but the regional bureaus, the Bureau of European Affairs or

African Affairs, et cetera, funding the cost of utilities with contributions from other agencies. But it's the posts that fund the utilities.

Now, what we've done -- and there are many posts that are interested in going green and I would say that half, two-thirds of the ambassadors that I meet with ask what they can do to be more green. And OBO published a green guide a couple of years ago.

We sent a message to the field about -- what is it, Bill -- about six months ago now explaining the ESPC Project and telling posts that we would stand by in a technical advisory role, but that the funding would have to come from the posts, from the regional bureaus and the other agencies representing the posts.

And we have Under Secretary Kennedy a couple of years ago signed a memorandum of agreement with the Department of Energy so that we can tap the Department of Energy's group of energy savings contractors.

Unfortunately, in the last six months, we

haven't gotten any responses to this cable. In other words, no post has come in and said we'd like to do an ESPC. And I suppose that's because the -- convincing the post council that has to vote to fund the project out of projected savings in utility costs is not willing or is concerned about the savings.

And I'm looking at Bill and his folks. You -- Dave Shaffer who --

MR. SHAFFER: Dave Shaffer, energy engineer or energy manager within design and engineering. Been working on the ESPC Program for at least two and a half years now.

Moving forward, we did start with Department of Energy and understand how the process works and developed how it will work for OBO.

And, yes, Janet, just as you said, we do have a lot of challenges with our -- the regions, the funding streams, you know, the work to be done, as well as the contractors being domestic versus

overseas.

We've started the process to move forward with the Department of Energy, ESPCs, the ESCOs, as well as laterally with UNICOR through the Federal Prison Industry. We actually have a solicitation on the street now for Valletta and Malta to do a covered parking photovoltaic installation at the new embassy site in Valletta.

So we are -- we're slowly moving forward because we don't want to go too fast and shoot ourselves in the foot and do something wrong whereas we definitely want to get it right from the beginning.

And that's where we've -- we've started with the smaller ones. We will be looking to do larger ones in the future. We've already developed site data packages for Santiago and San Salvador that we'll be putting out hopefully within the next few months.

MR. NAMM: Thanks.

And I think your point, Janet, about

bundling is a real good one because some of these posts, and Dave is nodding his head, are small enough that it may not be in the ESCO's interest to do work there. But if we can bundle and get three or four or five posts together hopefully in the same region --

MR. SCHAEFER: Right. And one thing that we're looking at is for posts that are within a -- within the same country, for instance, Germany. So we have a lot of large facilities within Germany that fall under the same management and the same finance that could be grouped together within a single ESPC. So that's another option we're looking for as well.

MS. WHITE: And as you said, you have a solicitation out. You're getting no response. So is there a plan for how to --

MR. NAMM: Well -- and this is --

MS. WHITE: -- revise that to rally it?

MR. NAMM: -- maybe unique to the Department of State, the structure where the utilities and,

therefore, ESPCs would be funded by the agencies at post, not an OBO fund.

It's a regional bureau, Bureau of European Affairs, Bureau of African Affairs. State funds about 70 percent. Typically we're about 70 percent of the U.S. presence overseas. And then the other agencies, Department of Defense, Department of Agriculture, et cetera, fund the other 30 percent.

And it's a matter of that -- it's called the ICASS Council, the, and I always mess up the explanation of the acronym, it's the Interagency Administrative Cost Sharing Agreement overseas. It's the ICASS Council at post that pays the utilities and, therefore, would have to fund the ESPC.

Bill.

MR. MINER: Just -- and this is a question to anybody on the panel. As Dave said, we're cautiously trying to explore this. But to my mind, the success or failure of it lies in lenders.

Honeywell did this building. Of course, they were able to place some of their products. But at the end of the day, they had to borrow a lot of money, 20, $40 million, with a promise of payback from a stream of utility cost savings from the Department of State.

And I'm just trying to find out what's the lending mentality right now for perhaps investing in, say, lighting improvements in an embassy and -- I mean, are there financiers that are willing to do that because without the money, the ESCO can't really perform the work? Any feeling about what's happening in the market?

MR. MULDAVIN: Yeah. As a money guy, the -- yeah, the market is not good for doing it here in the U.S. let alone somewhere else in the rest of the world. But you can get -- I mean, the key issue relates to risk and insurance. And if you have somebody like a Honeywell that's guaranteeing some of the performance and some of the other things, you

might be able to get it done.

But it's -- there's not a natural market or even a lending market for energy savings related types of things because most lenders like some sort of security and an incremental investment in energy savings doesn't provide that.

So the answer is it's difficult on the financing side. And that's why if you look at ESCO contracts in general, there's only, you know, 85 percent of all the ESCO contracts are in the public sector because you can work out some of the financing issues or they'll finance them internally.

But the private sector, only three or four percent of all ESCO contracts are in the private sector because of the financing issue.

MR. NAMM: Okay. Thank you, Janet.

MS. WHITE: You're welcome.

MR. NAMM: Appreciate the presentation.

Let me recognize Lydia Muniz, deputy

director of OBO, who will be talking about design excellence. We'll do that after lunch.

MS. MUNIZ: Yes.

MR. NAMM: Okay. Great. Let's see. Sack has not made it yet, so we'll move on to Kathleen. Kathleen will be talking about contractor risks for construction of the overseas U.S. building supplies.

Please, Kathleen.

MS. SHANAHAN: Good morning, everybody. It's great to be here. I am -- I'm here on behalf of CIRT, the Construction Industry Roundtable, which really represents 70 to 80 percent of the construction industry based in the U.S., but they do much work globally.

And even though my company who -- the next slide just gives you a snapshot. I think everybody should know who's speaking. We do -- I love all the green talk because we actually have been in the business for 25 years of cleaning up contaminated

soils. And it's a very important business.

But going on to the next slide, I'm here talking from an industry perspective of the contractors that do work globally, some of the challenges that they have seen in terms of trying to do work with the OBO and doing work internationally.

And I think one of the key issues that came up in sort of -- if you can stay on that first slide -- just talking to many of my peers that do participate in bidding on these jobs and seeking work overseas with the government is the capital outlay or the capital budget and sort of really seeing an infrastructure line item in terms of that being any sort of certainty, whether it's to your lending community or to ESOP ownership in terms of a sustained, you know, regular flow of dollars to pay for the project.

I think on the next slide, we've seen a -- we've seen a significant amount of decrease, a 69

percent decrease in average numbers of firms that are prequalified to bid from 2006 to 2008 is substantial, as well as the number of firms that did bid, 38 percent.

And when -- you know, I looked at these data from the GAO study and talked to a lot of my -- again, a lot of my peers. I probably spoke to 40 to 50 percent of the construction market in just an e-mail exchange to get -- to prepare for today and they said one of the -- the biggest targets is again the security challenges, the costs, the nonability to basically have it be a profit, a profit project for them.

We can go to the next slide.

And you'll see -- I just gave a snapshot of some of the firms. I know it's small to read. You have the Power Point. But it talks about the prequalifying firms and the number of bidders on some of the more recent projects.

The next slide gets specific to some of the direct feedback that our risk to contractors in terms of their ability to do this. You know, they're running a business. They have their overhead costs and a business is not an NGO as a lot of people would like us to sometimes be considered.

But -- so, you know, the project costs are increasing. The State Department work that had been bid and won, you know, frankly was not profitable just due to some of the challenges that you all face day in and day out in some of the risky environments where you do work and dealing with security clearances for the American workers.

And at the point that the data was given to me, this was in 2007 from at least the GAO report, there was a relatively abundant domestic construction market. I think that there are some -- there's a relatively abundant, I would say, market, international market for contractors to go that's

probably not as much due diligence or process as the current NEC, OBO projects.

I think there are a couple concerns coming out of this administration. The next slide talks about in source versus contracting. And it's created some, I would say, just unknown in terms of what that actually means when they talk about -- I want to get the exact language that's used, but sort of is there -- even after post awarding a job, there's still the ask to the agency, you know, can this be done by our own government workers or government employees and what does inherently governmental criteria mean as it relates to OBO.

And, you know, when you're running a contracting, consulting -- I mean, construction business, you know, any sort of certainty versus uncertainty in the bid process, you're going to go to where you can find the most certainty. I think that's just probably a natural inclination.

And so as much as that can be further clarified, that would be helpful in terms of increasing your bidding pool and having more interest.

And then my last slide or second to last slide is really again looking at sort of the definition of the inherently governmental and how this relates to -- from a contractor's standpoint, how does that look at from even looking at bidding on secure logistics operations or the transit security, what exactly does that mean from your perspective in terms of the inherently governmental qualifier that is right now, you know, some new language that's out there again from the construction contractor perspective.

And, finally, I would just say that, you know, in summary, I think the key points are the ability to see in a line item if possible an infrastructure line item budget.

I think addressing the contractor risk in terms of the pre-quals and profitability and

consistency of work would add to your pool and a reasonable profitability.

I don't think that people are -- you know, I think people view the work with OBO as a badge of honor and an opportunity to sort of excel and show and use it as a footprint to get overseas.

Sometimes you get these multi-year projects and you can actually get a, you know, sort of land lock and then expand into other opportunities over there, again as a construction contractor.

But I think that there -- you know, the volatility in any sort of perceived commitment from funding, it's hard to then get workers or management to go over and then not have that be, you know, sort of viewed as, you know, consistent.

And I think that's what from the construction industry roundtable some of the observations that they asked me to communicate as their spokesperson today. So I'm happy to be here.

MR. NAMM: Thank you, Kathleen.

Questions, comments about that?

Please.

MS. MUNIZ: I have one question. I'm not sure I understand the comment about the volatility in funding given that our -- the funding that we have annually to commit to these types of large scale capital projects is fairly consistent, though I hear you on the other points.

MS. SHANAHAN: Well, I think their point was, is that it's not listed as capital infrastructure budget or capital budget, you know, that they would see as for the contractors. I think it's listed out, at least from what I pulled out of the budget, it's got lots of other categories and so there's not a line item. And if I'm wrong, then that was misinformation that I got from some contractors that have bid for this work.

MS. MUNIZ: Our capital security cost

sharing program which is the program that funds new embassy construction --

MS. SHANAHAN: Uh-huh.

MS. MUNIZ: -- not renovation --

MS. SHANAHAN: NECs, right.

MS. MUNIZ: -- until we have a pool is really almost -- it's uniquely used for building these new embassies. And while it's a fixed amount, so it's near $1.4 billion, it's the same amount every year.

MS. SHANAHAN: Right.

MS. MUNIZ: They may not know what part of that goes to the construction contract, but you could fairly easily extrapolate that a certain percentage consistently goes to construction contract and others go to soft costs on an annual basis.

MS. SHANAHAN: Uh-huh.

MS. MUNIZ: I mean, I just would think with respect to that one point that unlike a lot of private industry that has had to rely on financing to develop

their projects, we have a fairly consistent stream of funding available to us.

MS. SHANAHAN: Uh-huh.

MR. NAMM: Yeah.

MS. SHANAHAN: I appreciate that. I'll take that back.

MR. NAMM: That's a good point. And, of course, we're never guaranteed, the caveat, we're never --

MS. SHANAHAN: Right.

MR. NAMM: -- guaranteed an appropriation, but we have gotten appropriations consistently. And in addition, and I talked about the awards in Kabul and Islamabad, we've also, and this is not something we certainly count on every year, but there have been supplemental appropriations --

MS. SHANAHAN: Right.

MR. NAMM: -- for the last few years such that a large chunk was the work in Kabul and Islamabad

and did not by that 1.4 billion in capital security cost sharing, but by supplementation appropriations.

MS. SHANAHAN: Uh-huh.

MR. NAMM: So that's a good point.

Other comments, questions?

Marcus.

MR. HERBET: Certainly --

MR. NAMM: Your mike is working.

MR. HEBERT: It is. I figured out how to work it.

Kathleen, certainly we're as interested in the decrease in contractor participation as your roundtable constituents are. And I would presume that Rod is happy with the decrease because he has -- he's been winning so many jobs and he's figured out how to do it.

We've been proactive in trying to get more companies to participate. Jonathan has been leading us in bringing companies in, briefing them on our

program, and attempting to get more participation.

And certainly we're disappointed when we do a fed bid ops on a project that might be worth $200 million and find only three companies that are interested.

Certainly we could look to your assistance in helping us --

MS. SHANAHAN: Right.

MR. HEBERT: -- become more marketable to the industry because we need better competition.

MS. SHANAHAN: And I think they would welcome that. I know that we have -- we've got a meeting -- we meet twice a year, the CEOs of all these companies and one of the meetings was here in Washington, D.C. So what I will do is get to you the date of that meeting, and it's like in February or March, and have you on part of the agenda. We'd love to have you come and give a presentation or talk about the interest. Can you do that?

MR. HEBERT: It's fine, but the problem we always run into is that the typical announcement for prequalification of our contractors goes out in the November or December time frame.

MS. SHANAHAN: Uh-huh.

MR. HEBERT: We ran into this problem last year. A lot of companies were interested and they came to us in February.

MS. SHANAHAN: Yeah.

MR. HEBERT: We had already gone through the initial step for prequalification. So the interest and the marketing needs to happen now because in the next two months, we'll be advertising for next year's jobs.

MS. SHANAHAN: Well, if you give me any data and information, I will have -- we have our meeting -- I just didn't know if you wanted to go to -- we're having a meeting in New Mexico the end of this month.

MR. HEBERT: Sure.

MS. SHANAHAN: And so I will take whatever --

(Laughter.)

MS. SHANAHAN: I was trying to make it easy anticipating the federal government impact on travel.

MR. NAMM: Actually, I'll say this here. Marcus got out this very large program at the end of FY '10. He deserves a trip somewhere.

(Laughter.)

MR. NAMM: And we'll send Marcus to New Mexico.

MS. SHANAHAN: Well, if you can make it to -- I'll get you the data and if you can't make it, then we can get the information and definitely get it announced at the meeting and talked about. So I'd be happy to do both.

MR. HICKS: If I could just add something having worked on your side of the business. I do the real estate, but we also do the long-range maintenance

and building plans.

I mean, we have a plan on where we're going. We don't make it up year to year. And I know it's hard for your industry to turn on a dime. But we know where we're going. That list changes. But we have a sense of where we want to be.

As Lydia said, it's been a, a different use of the word sustainable, but a sustainably financed program. And I think one of the challenges that you have to -- it's not like deciding to show up in Atlanta and build multi-family housing. I mean, there are some barriers to entry either working with the federal government or working internationally.

But, you know, that's a formula that may appeal to some of your members and participants. I mean, you don't want to go to Atlanta and compete against 30 or 40 other people who can build multi-family housing.

MS. SHANAHAN: Uh-huh.

MR. HICKS: There are barriers to entry, but I think, you know, if it's couched that way, clearly people have figured out how to do it. And I think that's maybe the message that needs to be brought to them. There's money. We know where we're going. It's worth the long-leap investment, I think, to work with us. We've been around. We've survived different Congresses and different presidents.

The threat remains. I don't think we're going to go anywhere any time soon. You just got to realize that it's just going to take a long leap and a little bit of effort to crack that nut, but clearly people have done it.

MS. SHANAHAN: Uh-huh. As a company who does a lot of work with other federal government agencies, I totally agree with everything you said because once you figured it out, it's a very nice sort of platform to be in along with your private sector business.

MR. HICKS: You just got to take that leap of faith with this.

MS. SHANAHAN: Right.

MR. HICKS: And that's what we try to tell people. Cut your teeth on maybe a smaller project, but there's a way to do it. There really is.

MS. SHANAHAN: Well, I will happily directly communicate that, but I'll also get to you through Christy when the meeting is and any information and/or if you can attend, that would be great.

MR. NAMM: Okay.

MR. EVANS: I'd just like to --

MR. NAMM: Please, Rod.

MR. EVANS: I'd just like to add, and I agree with what Jay said, I think contractors who become successful, and, again, Rod's company is successful when he bids, is he understands the logistics. Overseas work is not like doing work in the U.S. There's a lot of risk in the logistics --

MS. SHANAHAN: Right.

MR. EVANS: -- and risk in the security.

MS. SHANAHAN: Uh-huh.

MR. EVANS: And once contractors, you know, take -- get a piece of this in a smaller project, they start understanding what the logistics demands, what the risks are in security and then can become more successful.

We've had contractors that start out and I would say they probably aren't -- isn't very profitable on their first job because they're trying to understand what the costs are and what the risks are. But once they've cut their teeth on a project, then they can bid more successfully on future projects and knowing that can then perform even better and make it more profitable.

MS. SHANAHAN: Uh-huh.

MR. EVANS: And, again, you know, we see that in Rod, you know, Cadell and Harbert both have

been successful in our projects because they understand the costs and the risk and have developed their companies to work on those items. If you're just doing one project, we're going to do this one time, then I would say you probably won't be very successful at it.

MS. SHANAHAN: Right. Right.

MR. EVANS: But if you want to go after it in the long term --

MS. SHANAHAN: Build up, right.

MR. EVANS: -- then you'll develop your companies such that you know what the risks are and you've developed your business operation in that manner.

MR. NAMM: Okay.

MS. SHANAHAN: Totally agree.

MR. NAMM: Kathleen, thank you --

MS. SHANAHAN: Thank you.

MR. NAMM: -- for your presentation. And

we'll move on to Bill Rodgers, sustainable facility management practices.

Bill, please.

MR. RODGERS: Great. Thank you.

Good morning, everyone.

Okay. I just want to go through some trends and items going on in the industry, you know, for consideration and discussion.

On an annual basis, there is an energy efficiency and facility survey that's done across a pretty broad spectrum of companies both domestically and internationally as far as what are the drivers that are causing them to make investment decisions or business decisions relative to sustainable practices.

If you look at this slide, what it really begins to show is what the significant items are that are driving companies from an operational or capital perspective to make their investment decisions.

And not surprisingly, the very top one of

energy cost savings really when you look at the significant categories extremely variant, somewhat significant, the top three, that gets you to almost 95 percent of the driver behind why these companies are making various decisions.

The next few coming down, enhanced public image, clearly the brand that an organization has and the image that they want to convey in their marketplace to the public becomes a very significant component as well. And I would even offer that I think that has a fairly significant financial impact as well.

Government utility incentives, running a company that partners with utilities and works with customers on a daily basis, I would tell you that utilities at least here in the states now, the majority of the funding and monies that they are investing from a demand side management energy efficiency perspective are in this incentive arena.

And that is working with entities to attempt to upgrade equipment and put them in a position to where they have the most efficient operations, whether that be lighting, HVAC, or other energy utilizing equipment, literally you're talking about billions of dollars that are spent here in the U.S. on an annual basis, as a motivating factor to try and get companies to increase that awareness.

And fourth on this list is greenhouse gas reduction. I mean, clearly it is a significant topic. It isn't the driving force, but it definitely is in the top five as to what is continuing to ramp up on businesses' radar screen.

MR. NAMM: I want to know who are the one or two percent that said cost savings are not at all significant or not very significant. I don't get that.

MR. RODGERS: I'm thinking we must have got a few nonprofits in there --

MR. NAMM: There you go.

MR. RODGERS: -- that look at it a little different. I don't know.

MR. NAMM: Good point.

MR. RODGERS: And, you know, kind of the trend over the years in looking at the importance of efficiency to the business, if you look at it two ways, the -- kind of the black and the blue boxes. The black is kind of general operation. The blue represents how they are considering energy efficiency as a priority with construction or retrofit projects.

So it still remains very high. It peaked at 93 percent in '09. This most recent year was still at 84 percent. I think that's having an impact from a capital, you know, availability perspective more than anything. I don't think it's really a prioritization issue.

Next.

And then if you break it down a little bit

further in regards to the size of buildings that the participants in the survey, and not only the size, which is on the left, but on the right-hand side, the industries and the sectors as to where they are placing importance, are they going to make energy efficiency improvements over the next 12 months utilizing capital within their operations.

And as you can see, you know, government education really is kind of leading the way with 70 percent an absolute yes in regards to the sectors. And obviously as you would expect, I think some of the larger facilities where you're having your larger energy and utility costs are the ones that are focusing in on that most aggressively.

We see that in dealing with manufacturing high utilization facilities that they are the ones that are focusing most, especially from an equipment perspective of trying to upgrade their -- the efficiency levels.

Most popular efficiency measures, I don't think many of these would surprise too many folks, other than I think there are a couple things in here. The first and the last two clearly are tied in with investments, capital investments or supplies in incorporating into the facilities.

I think the second and third are the ones that I think are more significant and that is that training has got to be a significant component of what an energy efficiency or facility plan is so that not only are we educating the operations staff, those that are out actively working on a daily basis, but taking that education even further to the occupants so that the occupants clearly understand their behavior as having a very large impact on what the overall efficiency rating is of their facility.

So it doesn't necessarily always have to be a capital intensive effort to where you're always going out and investing money. It literally can be

one where training programs are incorporated to go beyond just what the traditional, you know, facility management or operational folks would be involved in, but also the occupants of the facilities.

MS. MUNIZ: How do these track against the savings that are obtained from each of those activities?

MR. RODGERS: Well --

MS. MUNIZ: So, in other words, people are doing more efficient lamps. Is that because it's less expensive or because it has the greatest return?

MR. RODGERS: Traditionally you're going to have a much larger return on that.

MS. MUNIZ: So would you say across the board that the returns are proportional to the amount invested in them or --

MR. RODGERS: Yeah, I think they probably are.

MS. MUNIZ: Okay.

MR. RODGERS: I think they probably are. You know, I don't know that I can --

MS. MUNIZ: I mean, HVAC is, you know --

MR. RODGERS: Well, I don't know that I could necessarily equate --

MS. MUNIZ: Right.

MR. RODGERS: -- you know, the education component directly into that was the next level of savings. These are more behavioral items that various companies were taking, you know, into consideration as they were moving forward.

What you're going to find is the top at the second from the bottom, both the lighting, lamping, and your HVAC is where you're going to get into most of your incentives in partnering with your, you know, utility provider or generation provider.

And many of those are going to be regularly driven as well. I mean, especially here in the states and I know that's not necessarily the -- you know,

what we're talking about here. But here in the states, you're seeing a significant increase in the regulatory climate that is driving utilities to essentially make energy efficient, so the fifth fuel. And that has to be incorporated in with all the other generation components as they consider how they are moving forward as far as available capacity.

MR. MINER: And, Bill, the first and the last one are really kind of related. One is having an efficient fixture and the bottom one is controlling that fixture --

MR. RODGERS: Exactly.

MR. MINER: -- automatically.

MR. RODGERS: Exactly. Exactly right.

What we're also beginning to see as well is companies, building owners really trying to broaden out their view and understanding how they calculate their carbon footprint.

And traditionally we've seen, you know, the

scope one which really deals with their direct greenhouse gas emissions or emissions from sources that are owned or controlled directly by that company. Those are what, you know, most companies are really focused on.

However, broadening that out in two different indirect scopes is really starting to broaden out that facility's view of how they can have a much broader impact of areas and items from more of an indirect perspective in relation to those areas that they don't have under control.

Like, for example, scope area two is electricity and direct gas emissions and really understanding based on the fuel types that the utilities are utilizing, what is the impact as they make changes in their facility to the overall greenhouse gas, you know, emission levels.

Here again, as a example, our company in managing a lot of these rebate programs are helping in

working with business owners to upgrade their equipment actually will go through on an equipment by equipment item once we know and understand what the fuel mix is of that utility to understand by going from one level of equipment to another what the impact on emissions is going to be based on that investment.

So literally you can break it down to an individual piece of equipment tracking it all the way back into, you know, the fuel type of that utility.

Next.

And also looking at environmentally preferable purchasing practices which really is taking, you know, the price, the performance, and the environment into consideration. And in many ways, it's very similar to -- in the facility business, we like to look at total cost of ownership or total cost of operations, so it's not just what you build, but how you operate it, how long you operate it, and your ongoing repair.

In this case, it -- this really comes into the supply chain and not just understanding the price and the items associated with what we are procuring but also how and where that production was handled, what was the transportation to get the product to the market, is it local, is it distance, and really understanding the overall environmental impact of that procurement process.

Next slide.

I think this slide kind of goes -- the EPP organization benefits are, you know, kind of go without saying, but regulatory compliance. In many areas, we're going to continue to see the regulatory requirements increase.

Materials consumption reduction, once we really truly understand the impact of those materials and the life cycle of those materials, we can really manage the consumption levels much better.

Reduction of greenhouse gas emissions,

conservation of energy and water, indoor environmental quality based on the products and the items that we are buying as well does have an impact. And so understanding what that impact is ultimately makes the workplace, you know, a safer and more sustainable place.

Next.

You know, this goes a little bit into, you know, I think what Rod and Scott were both talking about, you know, talking about the certification and which levels and which areas and I think also a point that Bill brought up in regards to, you know, are we doing and striving for the certification or are we just looking at green practices.

And in this case, we continue to see a fairly constant view both from new construction and retrofit projects from a corporate perspective as far as are they looking to certify to a recognized standard or are the -- are they really looking more

for green elements and not necessarily driven by certification.

And I think we're continuing to see that the green practices are clearly important. The overall when you blend green practices and the certification has remained very constant over the years, but we're continuing to see a little bit of a reduction from corporate America in just doing it purely from a certification perspective.

And then lastly, here again, this goes into part of what Rod was talking about and I think also what someone else mentioned in regards to the global certifications that are out there.

And I think the question is, as we look at continuing to construct new facilities around the globe, do we establish that certification from a U.S. basis, in other words, do we utilize LEED or, you know, a Green Globes or do we go to that in country certification and really try and adapt our standards

to, you know, what that local certification process has been. So just I think a question to continue to wrestle with in regards to that.

MR. NAMM: I had no idea, this goes back to the earlier discussion, no idea there were this many.

MR. RODGERS: Yeah.

MR. NAMM: A lot of these -- most of these I haven't heard of. Okay. Thank you, Bill.

MR. RODGERS: Thank you.

MR. NAMM: Questions, comments?

MS. MUNIZ: I just wanted -- it occurred to me that for us to implement different standards in every different country that we're building would be incredibly complicated. I mean, we try to standardize to a certain degree as much as we can about our program.

You talked about the complexities of managing our projects. I think it just increases if we sort of change these types of standards in every

country that we're in, but it would be interesting to look at different standards and see if, you know, if we merge standards or if we do something that's sort of more universal that goes beyond LEED --

MR. RODGERS: Yeah. To me, I couldn't agree more with what was said earlier in regards to establishing one standard. It makes it easier to measure against and understand.

But I think in this case, just looking at the varying standards that are in existence around the globe is, one, understanding what they are and how they compare to whatever standard we have developed --

MS. MUNIZ: Right.

MR. RODGERS: -- you know, here from an OBO perspective. So if there are -- you know, if there is a specific, you know, standard in China, that they have a different certification, what are the things that they have incorporated because undoubtedly as we're dealing with in country relations, you know,

some of those may be issues that arise.

And I think just understanding that versus just saying we're going with our U.S. versus in country, I think it's just a good topic and understanding for the posts to understand as to how they fit.

MR. NAMM: Yeah. In that vein, as far as I understand, Bill, correct me if I'm wrong, Bill Miner, but we will be applying for BREEAM, the British certification for our project in London, our new London Embassy --

MR. MINER: Yes, I believe you're right.

MR. NAMM: -- in addition to LEED. And the big part of green is public diplomacy. I mean, this is an ambassador being able to say to the host government we're going green and, in fact, they're getting pushed by host governments to go green, especially in Europe and, you know, Latin America and Australia, New Zealand, and other places.

But -- so there's a big public diplomacy component to this. And for that reason, it will make sense in a lot of countries to go with a local -- to do both, to go with an American standard and a local standard if we can.

Yeah.

MS. MUNIZ: Is there an international standard? I mean, we have the International Building Code. Is there anything sort of similar that tries to bridge the gap or provide a higher standard that's more universal?

MR. MINER: USGBC has tried to take LEED internationally, yes.

MR. NAMM: I think that sounds a little bit like 120 volts, 220, 110, 220, or beta, VHS. I mean, there are always competing standards.

MS. MUNIZ: Inches, centimeters.

MR. NAMM: Inches, centimeters, there you go. Okay.

VOICE: Excuse me. Adam.

MR. NAMM: Mindful of time, let's move on. Thank you, Bill. Appreciate that.

Stuart is going to talk about value management techniques in conjunction with design build procurement.

Stuart, there you are.

MR. SOKOLOFF: I have shifted here because I was a little unsure of the amount of time that was allotted, so I had enough slides for ten hours and now I find out it's only ten minutes.

(Laughter.)

MR. SOKOLOFF: So I'll be able to jump past those things that I deem not to be --

MR. NAMM: Thanks.

MR. SOKOLOFF: -- particularly relevant. What I'll be speaking about is the application of value management alias value engineering.

Within design build procurement and

specifically for federal overseas buildings, and I'm going to offer some options and opportunities for assessment and appraisal and not all are relevant in all venues, so I call them in general specifics. If you agree, it's specific and if you don't, then it's just in general.

(Laughter.)

MR. SOKOLOFF: The outline for the presentation will be the application of value management to touch on constructability, risk, and cost estimating in foreign venues.

Specifically there's a difference between designing and building here in the states as opposed to foreign locations. And the more exotic the location, the more extreme they become and particularly materials' availability, equipment, energy, supply, labor, skills, transportation of materials to the job site and the sophistication in whether facilities can be partially prefabricated or

not.

So in the United States, it's almost specifically that it's known and in foreign locations locally specific.

Value management is the process of designing best value whereas design build is only a procurement protocol. And I'd like to make the point that they are very compatible. They don't always do the same thing, but they are not in opposition.

The benefits whether a project is procured standard design bid build or design build are reduction in capital costs, life cycle with increases in quality and value.

There are typically six phases, one through seven in the VE process. And I'm not going to dwell on these very long because if -- okay. The stages are really one through six. But if the idea is not implemented, and I'd like to say that the idea not fulfilled in construction has no value, so

implementation is part of this. So when we go to design build, that is the essence of implementation.

There's a little bit different process or mind set in my opinion in the standard phases of design build as opposed to its application in a design build procurement where the value management in design build is really not quite necessarily so rigid and so formal and the many steps can be combined into two steps which is let's be creative, let's evaluate ideas, and then it gets implemented.

So these are just verbal descriptions. I'd like to show you examples between formal and informal value engineering.

This is formal.

(Laughter.)

MR. SOKOLOFF: This is a project I did for New York State DoT last winter. And this informal. I did this in Canada.

Okay. So forming the team is also a little

bit different because when a value engineering workshop is done during the design, which is most often the case, there are participants which do not include the design build team.

If a value engineering workshop is performed after the design builder is selected but prior to his notice to proceed, so schedule is not impacted, then the value engineering workshop can incorporate the actual people who are doing the final design and the builder which never happens under the standard design bid build procurement.

There are many similar goals, constructability, quality reduction in schedule. There are many compatible goals of challenging scope as one.

Timing of the value engineering workshops, there are options for very early in the project which is really scoping during 20 to 30 percent completion.

And what happens in a design build, there is

another opportunity to evaluate the basic parameters that the design build team put his bid on so that the study is carried to another level because during standard procurement, the contractor builds on the plans. And unless he puts in for a value engineering change proposal, there's little opportunity for change after that point.

For constructability, and everybody has their own definitions and sense, it's how can something be built better, is it feasible, is it the best way.

For risks, and my background is both engineering and contracting, that the project risk almost always falls to the builder whether it's in a design bid build or design build.

In doing foreign embassies, the risks very often will fall to the user, so it becomes even more critical.

Yes.

MS. MUNIZ: I just wanted to step back to an earlier point in your presentation where you're sort of dividing between design build and design bid build and where value engineering can play a role.

And I think that you're sort of organizing this based on the -- an assumption about the way in which somebody does design build or design bid build. Either way, you could do a design bid build project and have early contractor involvement and go through the VE process from the very beginning of design with a contractor, VE folks, estimators, and your designer from the outset. I've been involved in such projects.

Conversely in design build, you can have a contractor who is interested in looking at design build or interested in looking at value engineering recommendations, but who may or may not be compelled to go with those recommendations.

An example for us is where we'll have the recommendations to put in more expensive either

systems or materials that are going to be better for us in the long run, but it's really not to the contractor's advantage to put that capital right up front. They're not going to see the profit from it.

So I just want to flag what I see is assumptions about how these things are exercised rather than sort of absolutes.

MR. SOKOLOFF: Well, again, this falls into the in general comments. And I would say that when value engineering is performed when a standard design bid build procurement is going to be the mechanism to buy the job, that you certainly can have contractors involved and very often there are, but you won't have the builder involved.

MS. MUNIZ: You may. It's a choice.

MR. SOKOLOFF: Well, you don't know who that builder is yet because the job --

MS. MUNIZ: That's not --

MR. SOKOLOFF: -- the job hasn't been let

out.

MS. MUNIZ: That's not necessarily true. I mean, if you're going with a classic waiting until the design is done until bidding the job, but there are any -- in other words, what I just want to make clear for everybody is that there are a lot of different methodologies --

MR. SOKOLOFF: Absolutely.

MS. MUNIZ: -- in approaching relationships between builders, designers, and the client.

MR. SOKOLOFF: See -- and I agree completely. And if you have selected your contractor very early in on design, then what you say is perfectly applicable.

The estimating of projects, it is difficult enough to do an estimate here in the United States in establishing a budget for a project and that can be seen in project XYZ is let out for bid and even those entities who are going to construct the project, there

can be a wide -- a very wide swing.

So the estimating is problematic and the easiest way to know the real quote, unquote cost of a project is if it's let out design build while at 25 or 30 percent after you issue the RFP and make your selection. Very early in the design, you know what it costs, unless there are changed conditions in the field, because you have your hard cost bid.

So I'll leave it at this because we don't have enough time to go through the next 7,000 slides. And if there are any questions, I'll be glad to respond.

MR. NAMM: Thanks, Stuart.

Other questions, comments?

MR. HOCHULI: I'm just curious on your comment about estimating projected cost U.S. versus foreign. Is that changing as more and more information is available through internet where the ambiguity of doing work overseas, you know, there's

more information available?

MR. SOKOLOFF: I have no specific knowledge of that, but let me conjecture. Let me take an educated conjecture that it makes estimating faster. I don't know if it makes it any more accurate.

MS. MUNIZ: Let me ask one more question. You also commented on, but I think you added something after the fact, that in design build, the contractor is taking the majority of the risk which isn't really -- it isn't really my understanding or is it our experience?

I mean, I think that what happens is the contractor takes on a certain kind of risk, but the client also takes on a certain kind of risk. In other words, if the contractor realizes during the project that they need to cut certain things out of the project to make their budget, that's what they're going to do. They can cut in quality.

The risk on the client side isn't quality.

The risk on the contractor side is financial. But I think to sort of -- to set up a paradigm that it's really the contractor carrying all the risk, I think, is a false one.

MR. SOKOLOFF: Well, if the contractor is failing in his efforts, yes, it goes back on the owner. But the owner is always going to get remedy through legal, through action in going after the contractor if the contractor is not fulfilling his obligations in regard to substandard design.

There are programmatic requirements as set forth in your RFP. There's always involvement of the owner's representatives. And should a design be presented that is not in accordance with standards which is not in accordance with --

MS. MUNIZ: I think I'm talking about --

MR. SOKOLOFF: -- the terms of reference, then it's not accepted.

MS. MUNIZ: I think I'm talking about more

discretionary choices to do with materials or systems. So when there's an ability to go with sort of the best or something that's durable but that's more expensive, there's also the possibility of somebody choosing to go with the less expensive option and with the thing that's not going to give us the return in the long run that --

MR. SOKOLOFF: There are specifications that are put out with the RFP, the request for proposal, for the various design build teams. And they provide the minimum standards.

MS. MUNIZ: The minimum standards.

MR. SOKOLOFF: They provide the minimum standards. You shall provide this type of concrete or this type of fascia. The security must accomplish this standard and the design build teams would be nonresponsive in their bid for coming back with anything else.

It's not, okay, I would like a building over

here and you can all bid on the building and let me know what kind of material that you would like to install. There's always standards and minimums and requirements where all of the design build teams must comply.

MS. MUNIZ: I understand.

MR. SOKOLOFF: Now, if, if during the value engineering workshop after the award that design build team would like an exclusion from what was a requirement, it can be requested, but it's up to the owner to say absolutely not, that is not an acceptable system or material. You are required by your contractual obligations as the entity that was awarded this bid to build in compliance.

So if it's deemed in your interest to change a requirement to scope parameter for something that is of benefit, you have the option and if it's not, you absolutely deny it and the contractor is required by his contract to build in accordance with the terms of

reference.

MS. MUNIZ: I think my point is only that in terms -- with respect to sort of both of these delivery methods and every delivery method in between, they have their disadvantages and their advantages.

MR. SOKOLOFF: I agree.

MS. MUNIZ: All of them do. And we have good examples of working relationships in both design build and design bid build. But I don't think that going with one or the other guarantees a certain outcome.

I think that it's very much incumbent on both the client and the contractor to develop a relationship to make these successful. But I don't think that selecting design build automatically gets you --

MR. SOKOLOFF: Well, the --

MS. MUNIZ: -- gets you sort of an outcome or an optimal outcome.

MR. SOKOLOFF: The gist of what I presented is, and I think I qualified this in the beginning, that there is no one way that's a best way. Each project, each location, each dollar value magnitude, each complexity has its own merits for one or the other.

And as far as what you've just stated, I'm going to include that in my next slide.

(Laughter.)

MS. MUNIZ: All right.

MR. NAMM: Okay. Good. Thank you, Stuart.

MR. SOKOLOFF: You're welcome.

MR. NAMM: Appreciate it. Good discussion.

MR. SOKOLOFF: And thank you for inviting me and I love all these badges.

MR. NAMM: And the badge is yours to keep.

MR. SOKOLOFF: I will. Thank you.

MR. NAMM: Suitable for framing.

Let's -- we've got about ten minutes. We

can go over a few minutes.

VOICE: Yeah.

MR. NAMM: I know we'll try to get out of here as close to noon as we can, but Greg, and it's a good segue, Greg from the DBIA is going to talk about maximizing the design and construction outcomes through process integration.

Please.

MR. GIDEZ: It's a great segue. Can I have the rest of the day? I'm going to need to move down here and run the slide from there.

MR. NAMM: Sure. Sure.

MR. GIDEZ: Okay. First of all, thank you. Greg Gidez. I'm from Hensel Phelps Construction Company. We've done some of those projects overseas that have had their challenges, but we won't speak to them today.

I'm here to represent the Design Build Institute of America. And from when I listened to

everybody, it might be the Desired Behavior Institute of America as opposed to Design Build.

(Laughter.)

MR. GIDEZ: I'm also an architect, although I work for general contractors. So I'm a visual person. I'm going to bombard you with many images here. Then I'll speak to the important ones. I'll let you read as we go along.

So we've been building buildings a long time and it's been thousands of years since we figured out that we can actually make something more than just shelter out of our buildings.

In speaking to whether or not you can run a design build competition successfully, here's an early example of Bruno Leski's (phonetic) design for the dome where he integrated design engineering construction in the processes in delivering the dome.

Same thing with the Brooklyn Bridge. The Roeblings invented wire rope and then figured out how

to manufacture it and was able to span the East River with their bridge.

More recently the Disney Concert Hall, an integrated design engineering and construction technology to achieve what they did, although it was not very cost effective and we can't do this every day.

Things haven't changed a lot. We've still been doing it the same way, especially in our contracts and our willingness to penalize failure rather than reward success. And I'll talk a little bit more about that a little later.

NIST says we're the most dysfunctional industry in existence right now and we've only gone down in the last 30 years in our productivity and our performance. And we're only second to agriculture in our lack of investment in technology and innovation. And I think that there are ways that we can deal with that.

So here we've got the status quo --

MR. NAMM: Greg, why does NIST say the construction industry is so inefficient?

MR. GIDEZ: Because I think in a lot of ways, our contracts have gotten in the way of our ability to really deliver the best that we can. We've sort of siloed ourselves into the owner here, the designers there, the contractors there, the facilities operators. And then when we also heard here, and we'll speak a little bit about this, the building occupants, we can't have a net zero building unless we retool our occupants in how to live in that building.

So it's -- we've got to sort of bring it all together. And so, again, some of the things, the behavior of our occupants, the behavior of our designers and contractors, our owner behaviors, and then how can we best use new technologies to achieve these things.

So the status quo, as I said, these are the

outcomes that we see too often in design and construction. And I think we can overcome them with some reconsideration of the processes.

We've talked a bit about sustainability here this morning. These are drivers of the industry right now, but there are better ways to achieve the outcomes that we're looking for if we integrate our processes.

And one of the things we talked about this morning was the greenhouse gases and the U.S. is, you know -- what are we at, four percent of the world population and we're cranking out more than our fair share of the greenhouse gases? So I think we can do things about that also.

And I think the world is expecting that of us as leaders of the free world and innovations. We've always been known for our innovations and our willingness to look at new ways to achieve the outcomes that we desire. So I think there's a real impetus for us to take the lead here.

And there's going to be a lot of building. Although we're in a decline or a depression or recession, whatever we want to call it right now, there's going to be a lot happening in the next 30 to 50 years here.

And, you know, with the way the world is growing, there's going to be a lot of new building going on and I think we can impact that with our processes. One of my favorite architects recognized this a long time ago.

So what do we have for a stimulus to do things a little bit differently here? Obviously the world economy. We're competing for natural resources. I think the latest one is the rare earth metals. We cannot go and mine them out of the ground and still meet our environmental goals, so we look overseas for them.

Obviously the financial turmoil, a lot of waste and inefficiencies in construction industry

going back to that recognition by NIST. We've got to do it better, cheaper, faster, more affordably.

Obviously for the OBO, the issues of security and then the discussion right here of how do we achieve quality in our building designs through our project delivery methods.

So I think we're at a tipping point and I think we can do something about it. The watch or the car does not run unless the gears are all synced and getting the gears synced is part of defining the process. Whether we do that in our selection processes, whether it's quality source selection or it's design competitions or design build competitions or whether it's the good old fashion way of design bid build, we got to get the gears in mesh in order for the watch to tell time correctly or the car to run smoothly down the road.

So take the integration and I'm going to propose that it's not just the siloed approach that

we've taken in the past of the owner develops the prescriptive and performance requirements, gives them to the architect who tries to interpret them, who then has to fight change and cost and schedule issues until it gets to the market, only to find out that the market doesn't reflect the way the owner needs, and then we go back to redesign which brings error, confusion, challenge in the value management, value engineering that we just heard of.

And then the operators and the builders and the financiers and the insurers need to have a say at the table also. Wish I knew who said that, but if we all got together, we'd know everything.

Some people think it's BIM, building information modeling. But, again, BIM is a stand-alone tool as it is defined right there. I define it as BIM BAM BOOM which is building an analytical model, building information model which is our bid documents, building assembly model which is what the contractor

is actually going to build from it, and then the BOOM is the building operations and optimization model. And they all got to go together to make that one BIM really work.

So is that the answer? Well, it's going to require complete integration across the team and the integration is going to require BIM to be successful. So understanding BIM and how to apply it can really help us in the outcomes that we're looking for in building design and construction.

But it's -- and it's an opportunity that we haven't seen in the past. It can really change things. When BIM first came out or CAD, it was just electronic drafting and now it's a whole informational management tool.

And as a contractor, I propose that we don't deliver bricks and mortar anymore, but we're delivering information along with the keys. So that's critical to where we can take this.

So project delivery, the methods. Integrated project delivery methods include risk, design build, achieve greater outcomes for high performing buildings. When you silo the process you can't get the outcomes that are desired.

And this is from a study that was just released by the University of Colorado on project delivery methods and how to achieve sustainability. And it clearly showed that integrated processes will deliver better buildings, higher performing buildings.

And I propose as we heard here that the integrated process must continue into the operations and the behavior of the occupants once the building is turned over.

So can we do it? It's going to take changes in the way we do. We got to invest in the resources and information technology to make sure that we're using the tools appropriately.

The new thinking on education starts in the

classroom. Too often I go into universities and I see the architecture department competing for dollars with the construction management, competing for dollars with the engineering schools which sets up a process of siloing in the universities, that if we taught integration and collaboration in the schools, at least the people coming out of school would be ready to work together.

It's also education, as I said, on the occupants of buildings when we get to that point and we can function in net zero buildings.

The collaboration on establishing the right protocol include design construction operations. In order for BIM to get us there or to help us get there, we've got to start at the beginning before the project starts and integrate all those concepts all the way through.

Public sector needs to be more flexible in order to innovate whether it's in their contracts or

in their processes. Design bid build is a very tough way to do it. We talked about the risks there.

I think in design bid build, the risks for the appropriateness of design and completion of the documents lies with the owner. A lot of that shifts to the design builder in a design build competition or design build delivery, but there's still risk as noted with the owner, do they get what they want in their outcome. If they're involved in the process and they're integrated into the process, you can manage those risks.

We're all going to have different risks through the process. But if we integrate, then we can best manage them. And if we bring our issues to the table, then we can work collaboratively to work through those risks and mitigate them.

Again, the same thing in the private sector. We've got to be willing to step out. We've got to reconsider our partnerships with both industry and

design and also the way we construct. And we've got to be willing to take the risks in order to get there, but it's going to take an integrated and collaborative process with the owners.

So we must distribute those risks across the industry to make sure that they're in the right place. You know, there's a lot of buzz around what I'll call capital IPD, integrated project delivery, which tends to shift the risks around, that we don't all understand.

Obviously design bid build has certain risks and design build has other kinds of risks, but we need to balance the risks and with that, we can integrate better and get the outcomes we want.

So new processes. We got to throw out the old. It's not schematic design development, CDs, and bid documents and CA. It's sort of all blurred together now in the way we deliver our projects.

We need contracts that reward success rather

than anticipate failure and set up penalties for that. Incentives go a long way to both architects, engineers, and contractors in delivering the most -- the best. I think setting the bar high rather than setting the bar low and hoping people can get under it, challenging our design and construction industries to come up with better best rather than what can I exclude to get under the bar.

And then new fee structures. We pay -- you know, we always fight about design fees up front because it's the first thing we can talk about, but that's where we can really affect the outcome down the road if we understand what it really costs to design a building correctly and appropriately for the outcomes that we desire.

Same thing with contractors. Understanding where the money goes, where the risk is, and then working with the team to get there, and that requires new behavior on all parts of the -- all the wheels and

gears in the system.

So I think we can do it, but it's going to take a different approach to the way we do business. And, again, it comes back to the behavior all the way across the board.

And I can go into all these things in a lot greater detail, but for speed, if we don't want to do it, we're never going to get there. So --

MR. NAMM: All right. Greg, let me thank you very much.

Mindful of the time, it's five after twelve. The panel members, we've got to get upstairs for lunch. Lydia has one comment and we can continue this. It's another good segue because, of course, we're doing BIM as the first topic after lunch.

Lydia, please.

MS. MUNIZ: I just wanted to add what struck me about this presentation, and we'll talk about this

more when we come back from lunch and I brief folks on where we are in our process of developing a design excellence program, is that I think it struck me and probably a number of the people involved in the process that we really do need to find kind of a third way, that in many ways, whether you're looking at design build classically or design bid build, what's most important is really developing teams that are strong, getting everybody involved at the beginning, and getting people equally invested in the process. That's what really gets you the best outcomes.

And I don't know that I appreciated that before we started the process. So I think that your presentation is really -- is right on target about finding really a third way for moving forward in developing these projects.

So thank you.

MR. GIDEZ: Well, real quickly, you can -- there's a lot of competent designers and engineers out

there and there's a lot of competent contractors that can design or build the buildings that we want. But getting all the right people on the bus in order to work through that, not everybody at every contractor or architect firm is the right people to get on the bus in order to deliver the best that we can. So in part of your source selection, that is really critical. You're not selecting companies. You're selecting people.

MR. NAMM: Yes. Thought provoking stuff. Thank you, Greg.

Ramsey, you're going to take us into lunch with announcements.

MR. STALLMAN: Yes, please.

MR. NAMM: Please.

MR. STALLMAN: If I can ask that the table, the panel members and the OBO staff, if you all could exit first. I'd like to get you all up to your dining room first.

If I could ask everybody else in the room to just kind of hang in the room just a few minutes, let them get out. Then we've got escorts in the hallway. We're going to break you up into groups of, you know, four, five, six with an escort and take you to the cafeteria.

For those that are leaving for the day, that want to go out of the building for the day, if I could ask that you wait until the very end and then -- because we're going to have to escort you up. There's a very large group down the hall. I'm not sure when they're breaking, but it's close. And we need to get you out. We may have to take you out a different way. So if you could just wait till the very end.

So, panel and OBO, if you all could, senior staff, if you could leave first, that would be great.

VOICE: (Unintelligible?)

MR. STALLMAN: Yes. Yeah. They'll be -- we'll be guarding it. We'll be -- we'll have security

here.

(Whereupon, a luncheon recess was taken.)

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A F T E R N O O N S E S S I O N

MR. NAMM: Okay. Hope everybody had a good lunch.

I want to remind people cell phones, Blackberries need to go outside. So if anybody has mistakenly walked in with one, if it could go outside.

Let me say we had a good discussion with the panel members at lunch. And what we -- one of the things we talked about is soliciting ideas from the guests, from those others of you in the audience. And we'll do that about a month before the next IAP.

So the next IAP is April, mid April, and figure in early, mid March you'll hear from us with invites and requests for ideas which feeds into the panel roundtable as well as the other presentations. We want to know what all of you are interested in and where you'd like to see us and the panel drill down.

So with that, I had promised something on design excellence which is a work in progress. And that's something that -- Lydia Muniz who is going to give you an update on where we are and then we'll get into BIM.

Lydia.

MS. MUNIZ: Good afternoon, everybody. I apologize for my -- for being delayed this morning. I'm very sorry to have missed Jane Loeffler's presentation, but hopefully I'll make up for that.

I just wanted to give everybody a brief update on design excellence. I don't even know if this is something that made it on the agenda, but wanted to give folks a sense of what we've been doing.

For those of you who were here at our last April meeting, we outlined then a plan for developing a design excellence program at OBO. We outlined guiding principles that we had drafted. These are sort of meant to be the -- sort of the aspirational

goals that can lead us towards design excellence really now but in the future as well. All of those are available, I think, on our website or we can distribute those to any of you who might want them.

We also walked through a strategy for developing and implementing this design excellence program. The strategy that we laid out was really looking inward in the beginning, organizing ourselves across all of the different functional areas that we have because, again, our goal in this design excellence program was we're not sort of interpreting it narrowly. We're looking at it as something that is broad, that touches on every aspect of our buildings, of every aspect of their design from their maintainability to the site selection to the quality of construction to the quality of designs to their functionality and their flexibility for the users of those buildings.

So we organized a number of working groups

across OBO that are looking at a number of different issues from different angles.

We have a couple of the chairs here. Where is Dan Hogan? We have Dan Hogan here who's a co-chair with Bill Miner who's over in the back. I don't know if we have some other folks here. But if any of you have questions for them, certainly feel free.

VOICE: Brian Schmuecker.

MS. MUNIZ: Brian, Brian Schmuecker is chairman of the committee. So we have a number of folks here who are working on that effort.

I think what's been most sort of interesting for me, most instructive is that it's been a heated debate at times, but it's also been, I think, enormously instructive. We've looked sort of outside of the organization. We've taken a step back after, you know, ten years of a pretty successful program to see how we could do things better.

But we brought in folks from the outside.

We've looked at different methods of delivering projects. We've looked at both, again, design build, design bid build and really sort of what's a third way? How can we get folks who work for us, whether they're designers, builders, engineers, to work with us as a team to get these projects moving forward?

So at times, the debates have been heated, but I think what has struck me is that really the overwhelming majority of the folks at OBO, we love our work. We're interested in building great buildings. And I think that's something that drives all of us. So we've -- I would say we've learned a lot from the process. We're continuing to learn.

Part of what we've done is invited people from industry, whether architects or folks who've worked on a particularly successful design build project, for example, or folks looking at, again, the third way like the lean building process to come talk to us, to hear sort of what some of our issues are, to

share what they've learned in their building experiences. And it's really been very helpful for us.

So I think organizationally the process has been -- it's just been incredibly -- it's been very fulfilling. I think it's -- the process alone is helping us grow.

So it won't be simply sort of the achievement of these policies and procedures and a new way that we're hoping to roll out next spring, but it's really, I think, bringing our organization together and sort of breaking down those silos and getting people to work and to talk together about all of the issues that we're most concerned about.

So we hope to have something to be able to roll out at the next IAP which will be April. I guess I don't know if we have a date set right now, but we hope to roll out a new program for folks then. We hope to roll it out here and then we'll hopefully take

the show on the road and go talk to folks in industry, talk to architects, talk to builders, talk to engineers, talk to facility management experts. And that's the plan right now.

So it's been a pretty good process. If you have any interest in coming and sharing some of your experiences with us, approach me or Bill or Dan. We'd be more than happy to talk to you about that.

And I'd ask now whether either of you has anything that you'd like to add about the process.

MR. EVANS: I mean, in terms of the process, it's been an interesting experience. When you look at the program, I mean, we just completed our 73rd capital project in the last ten years. It's an unparalleled success.

But what the design excellence effort is doing is kind of treating it as if it was failure. All assumptions are being challenged, very, as you said, heated at times discussion, trying to do better.

So we're all very enthusiastic and hopeful that we'll get something better out of it.

MR. NAMM: Yeah. And let me say -- well, let me quote my predecessor, Dick Shinnick, who said, yes, a lot of heated debate, but out of heat and friction come light.

So we're looking to be enlightened. I think we are being enlightened. And Janet and I were talking at lunch about nothing ever being perfect, but you want to make it as perfect, make things as perfect as you can make them.

And we're responding not just to internal criticism but criticism from outside, from the Hill, from the press. And we want to move the program forward.

What we all know we can't do is have a program stagnate. And so we've got to keep moving forward and keep growing. And that's to my mind what design excellence is all about.

We've done some growth via bridging documents when we're talking about that. Bujumbura is the first NEC with bridging documents. That's growth. We're looking for further growth and that's what we'll find. And we'll have results in the spring.

Okay. With that, let's move on to BIM. I'm sorry. Does anybody else want to add anything about design excellence?

Go ahead, Bill.

MR. MINER: One of our early champions, Barbara Nadel, is somewhere in the back row there, there she is, who's been a great advocate for it, helped us kick start it, hosted several events at the AIA and elsewhere. And thanks to her, it allowed us to move forward.

Janet is now representing the AIA and will hopefully continue that important work with us. We need industry champions. We need input. We need a conscience to keep us pushing forward on this. Yeah.

MR. NAMM: Okay. Thank you, Bill, and thank you, Barbara, for your report.

And we're going to now move to BIM. I'm going to pick up on Greg's presentation just before lunch.

And got Brian Schmuecker and Bill East. Thanks for being with us. And take it away, please.

MR. SCHMUECKER: All right. Thank you very much, Adam.

Yeah. I think the presentation right before lunch is an excellence segue into this topic. I would like to give Bill's presentation a little bit of context with regard to where we are and what we've accomplished in the last ten years. And a lot of that happened to do with what Bill has done in supporting OBO.

DE has lead responsibility for design standards and criteria. We also have a requirement to incorporate the needs of over 50 customers. Those are

folks who take up a presence in our embassies and we have a great challenge in trying to incorporate their needs into the entirety of the mission for the department and for their agencies.

And we also provide design and design support to the posts and to other entities in OBO.

Under Bill Miner's leadership, he's championed DE to be a learning organization. He has a number of programs that facilitate that. Two of them are the Lessons Learned Program. The other one is the Building Innovation Program. That's the funding arm, if you will, for our research and development.

Early on, we looked for a way to improve the design review process. About ten years ago, we had a Word macro that kind of worked and it was kind of okay, but it was within the four walls of OBO. And we took that information and sent it over to the AE and you waited for a response type of strategy.

About ten years ago, we heard that there was

an engineer out in Champagne, Illinois named Bill East who had come up with an application that was a design review and checking tool euphemistically known as Dr. Checks.

Well, we looked at the application. We kind of liked it. We tried it. The more we tried it, the more we liked it. Started to build a permanent relationship with Bill's office and we started to look as a learning organization what other kinds of applications might we be able to use Bill's talents.

And so we started to throw some ideas to Bill and he seemed kind of interested. And then we started throwing some money at Bill and then he got really interested. And I think that's how the relationship really got going. We're very thankful in that regard.

So Dr. Checks rolled into a suite of applications under the Projnet banner. While we try to use industry standards as much as possible, Projnet

fills a void that we don't have any other way to fill and that is to be able to handle our sensitive information, our sensitive but unclassified information in a way we can transmit it back and forth across the internet in a manner that's protected.

Now, this level of information is just one step below classified information, not national security information, but it's a step above just unclassified information. It's on a need-to-know basis. And Projnet allows us to work in that need-to-know environment.

So we continue to pursue the use of Projnet in these additional features that we kept poking and prodding Bill about. And in about the last ten years, we've accomplished or added about ten enhancements. We have a file exchange folder now that we can transmit that SBU information with all our business partners both inside and outside of government.

We have the request for information tool.

We have a portal which is in essence a reference library for pre-RFP or pre-award activities. We have a plan room and better inquiry. We have internally an e-tasker process. DE has about 1,500 taskers we process every year. And Bill helped us set up a tool to manage all those taskers.

E-submittal for those of you who have worked on our contracts know that submittal processing is -- can be a laborious process and we've worked to help streamline that in support of construction management in particular.

Engineer Bill East became Dr. Bill East or Dr. Engineer Bill East over that time.

The users that are using Projnet on behalf of OBO are now about 3,000 people and I think that's a testament to the utility, functionality of the program, its usefulness.

And our latest accomplishment with Bill's effort and many others is that on Monday, we're

throwing the doors open to Projnet C in OBO. This will be a classified version of Projnet which will allow us to communicate with contractors and their project sites on a point-to-point basis.

We're doing a limited number of projects. Some of the FY '10s that were recently awarded will be using Projnet C. And as resources become available, we'll be looking to expand that functionality.

So we're very excited about that. A lot of people were involved. Bill's office helped us develop the architecture for that, Bob Clark's office, IRM, Ramsay Stallman and MSD. Security IRM is a very collaborative process.

And you talk about an integrated project delivery system or method or a model, I think how Projnet C came to fruition and opens its doors on Monday may be a testament the kind of way teams can work together.

With regards to COBie specifically, we

started talking to Bill about this about three or four years ago. We saw some real positive potential. Industry wasn't quite in a position to be able to tell us how they would use it, but we started requiring the data be collected so that as industry got on the cusp of developing the software to allow our facility managers to use it, we'd kind of be in position to do that.

And on Bill's recommendation, we went forward with that because we have high expectations on anything he does.

And with that, I'd like to introduce Bill East, also known as Dr. Checks.

MR. EAST: Thank you.

Those of you who are stakeholders for OBO and also do work for other federal agencies know the consistency with which you are interacted with in the context of Projnet and Dr. Checks at State Department which is quite different than how the individual

offices at various other federal agencies may have different processes.

And so this is one of the real reasons why I like coming here is because there is this collaboration and consistency and it really is a great place for me to bring new stuff and try it out. So thanks for letting me do that over the years. And obviously many of you in this room are the recipients of that experimentation.

So today I've been asked to talk about BIM and COBie. You know, if you're thinking about a design review when you put in a review comment, you have these boxes there that are sheet and detail, right? And when you put in an RFI, it's just a question.

Wouldn't it be nice if all of this stuff was somehow tied together so that if you asked a question about what's going to happen in Room 5 that you were able to query the database of the project over its

history and get all of that information, because especially when we get well past the end of the project several years after you moved in, if you want to find the answer to that, you've got to go through all of the project documentation? And most people are never able to take the time to do that.

So I think with that kind of frame of reference about where I see BIM and Projnet kind of pushing together, let me talk a little bit about the following topics.

Let me tell you a little bit about my vision and the vision of other people about building information modeling. For some of you that do this, this will kind of be an overview. For those that are -- of you that are new, this might be a different way to perceive this idea of building information modeling.

I want to talk about the importance of standards in this context and illustrate that by

talking about the Construction Operations Building Information Exchange as one such standard for the open delivery of building information model data. I want to talk then about actually practically using these in the context of projects.

MS. MUNIZ: Excuse me. Sorry. Can you repeat what COBie stands for again.

MR. EAST: Construction Operations Building Information Exchange.

MS. MUNIZ: I'll remember that.

(Laughter.)

MR. EAST: So the good news is if you just Google COBie, it's the first link and you can find out everything you need.

(Laughter.)

MR. EAST: Okay. I don't have a Wikipedia page, but, you know, I'll do that. I'll do that tomorrow.

And then talk about how COBie fits in the

context of other -- some other standards related to facility management handover which is the primary goal of this particular talk.

So what is BIM? So at the lab there when I first got there, it was about in the late '80s, there was a group called the philosophy group and their question that they would talk about at their Friday afternoon symposia was how to put a brick wall into a database. Now, this is a fairly, you know, difficult question when you start to peel it away and look at the different layers.

My favorite sort of point of view about this thing is that the laborer's interest in the brick wall is how many times he's got to move the bricks around before they actually get into the wall. And the answer is usually about five, right? So -- but other people are interested in all kinds of other things.

You've got people that are interested in making sure that blasts can't get through the wall.

You have other people interested about the structural properties. And obviously somebody is interested in the pattern of the brick on the outside of the wall.

So if you were going to model a database of this wall, it would be quite difficult. And so with that as sort of a motivating example about building information modeling, I think we can say was CAD a good model for putting a brick wall in a database. Well, probably not because all that you ended up getting with this kind of electronic drafting tool was really points and lines and any kind of information about it had to be interpreted because people would have to look at the drawings.

So the idea of a building information model is that the points and lines and the geometry is just stuff that comes along with the physical objects that you actually place inside the model.

So if you want to make a wall, then what you do is you say this wall is composed of a number of

different layers, here's the properties of all the layers, four walls together make the room, there's a door in a specific situation, and these things are not called line five. They're called Room 201 so that if you want to query it, you can get the information about Room 201 and its finishes and whether or not it has day lighting if you're interested in LEED or whether or not the floor has recyclable content.

So with an underlying idea of a database that provides a variety of different formats for viewing information, all of these things about walls and doors end up becoming one database with just lots of different ways to look at it.

From the point of view of the builder, he may only be interested in the 2D drawing on the left. From the point of view of someone who's going to be moving into that room, they may want to see a rendering and the specifier may want to go and identify the specific characteristics and fire rating

and lock sets and so forth, hardware profile of that specific door.

So these could all be generated from a single database provided that the database was appropriately structured.

So what is BIM? It's a building database that contains functional and geometric data. It's a shared knowledge resource. It could be if used appropriately, as one of the speakers said before, a basis for life cycle decision making.

What it's not is specific software. So BIM is not what a software company sells. Okay? They sell a product that can do BIM, but they don't sell BIM.

And one of the reasons it's important to think about that is because we all need different tools for different jobs.

Now, when I was a construction engineer, I liked the one that was in the bottom right. That was

my hammer.

(Laughter.)

MR. EAST: That was over at Arlington Hall Station and Fort Myer. But, you know, it's amazing to think all of these different tools basically have the same form. We have lots of different tools we need. And so to think that there's going to be one software tool that everyone should use in order to do this thing that we're going to call BIM is really not quite the right way to think about it.

So that's why we need standards. And here's -- let me give you an example. Does anybody in the room know what this is?

(Whereupon, there was no response.)

MR. EAST: Okay. This is a very important standard and it's on every device you've ever seen that's electronic. It's called the ASCII standard. And it makes the letter A look like the letter A on all of these devices.

Without ASCII, then you would have -- you would have to buy -- you know, back in the old days, people had wangs (phonetic) or they had something else or they had something else and the letter A was not the same on all of these devices. Now it's all the same.

So a really important idea here, too, is that if we have standards, then people can actually have a basis to innovate how they do their work. Without the standards, we have all these different people kind of competing for different things, each saying theirs is the best. So standards are very important if we're going to accelerate any kind of innovation.

So this is ASCII, American Standard Code for Information Interchange. I have to write it down, too, even though I know carriage return is CHR13. Programmers know what this is.

The surprising thing about this chart, it

looks pretty simple and it's letters and numbers upper and lower and a few symbols, is that people had to take 30 years to figure this out.

So this is an interesting place to put a benchmark for our expectation, right, about how we're going to put a brick wall into a database? If it took 30 years to do ASCII, let's cross our fingers and hope to goodness it's not going to take that long for the brick wall, but at least it's -- we should be able to be satisfied if we're able to make little steps relatively quickly.

So that's kind of an important historical point. So if we're going to make a BIM standard like ASCII for buildings, then we have some questions we have to answer like what are we going to put in our BIM standard, what's going to be the letter A and the letter B and the letter C, what information is needed about that stuff, how do we share it and who gets what when, and probably a very important thing is who gets

to decide this, right?

And one of the important issues here is -- and I might get back to it, but what I want to try and motivate by this particular piece of the discussion is the people who actually do the work should be the ones deciding, that if it's the software companies that get to decide, then you'll get what they provide and it might not always be what it is that you need. So you need a way to help you get your information to them.

And then, you know, the thing that we think of that's so important is that in DGN or WGN or IFC or, you know, spreadsheet, this last question really becomes trivial because it's just you display it any way you want as long as you know what it is.

So the format that we focus on is actually the least important of all of these topics, although it's important, not the most important.

So in terms of building information modeling, just like we had many tools, there's many

different perspectives. And here's some of the business cases that have been proposed or that are in place right now for people that use tools that say they have something to do with BIM.

So on architecture and engineering and consultancies, document coordination, design coordination is an important topic. Reducing drafting costs is from the things that I have read, the drafting cost of a set of construction drawings has decreased by 70 percent. On the builder's side, eliminating rework. We talked about -- the speaker talked about increased pre-fab and streamlining the ordering. That can all be handled on the builder's side. And, you know, these tools are in place right now and people are doing that. And as a result, the facility manager is getting a better quality building because there's not all that tear-out and rework.

If the information were able to be given to

the facility manager, then we'd be able to query the data and find out how many of a certain kind of piece of equipment were in all our properties all across the world.

Now, I know State Department has got a big problem with lots of different facilities and trying to keep track of all its assets. DoD has 570,000 buildings in over 100 countries. So you guys probably have at least one building in almost every country. We're not quite matching you country by country, but the volume of buildings is such that the various agencies can't even figure out what to call a building, you know. Is it the pesticide storage shed on the golf course or is it -- so, you know, these are very difficult questions. But having the proper information fed through the life cycle helps us answer those questions.

So there is an underlying format that has been started to be -- it started in the 1980s. It was

called the IGIS and it was specifically for gears and mechanical machine parts. And if you take one of these standards, you can put it in a grinding machine or a lathe or whatever and it will produce exactly the same product no matter where you make it, I guess as long as you get the units right.

People started thinking, hey, let's do that for buildings and then they started PDES (phonetic) project that turned into International Alliance for Interoperability and now we have an organization called the BuildingSMART Alliance that produced a kind of philosophy document that you guys might have heard of called the National BIM Standard version one, part one. So there will be some more information about that coming out this December at the NIBS annual convention.

So we have this underlying format that sort of provides something just below that ASCII file. We still have to decide what the letters and numbers we

want in there, but we now have a way to represent the things that those are going to be -- how that's going to be stored in the computer.

So if we're going to scope a BIM standard, we need the information in the BIM so that we can do our work, right, and each person's information needs are going to be slightly different? So it becomes a very difficult kind of question about what's a BIM standard.

So we also need different information at different times and how we share the information could be like these diagrams that you've seen where there's one central model and then the life cycle. Everybody puts data in and out of the model and, you know, that's great if you're at Stanford. But if you're a U of I graduate, you've got to think of something a little more practical. I guess it's just that Midwest work ethic.

And so my suggestion is really that we have

-- just like we have other information in our contracts that's required, it's a performance based spec for delivery of information. And as long as we have an open standard for that performance spec, we're letting anybody use any software as long as they can give us the data we need.

So you all get to decide through the BuildingSmart Alliance which is where I run these projects as the volunteer project coordinator and the underlying format is the industry foundation class model which is an ISO standard.

Okay. So now let's talk about a specific example. So has anybody in here heard of COBie before? Let me ask you to put your hands up.

(Whereupon, there was a show of hands.)

MR. EAST: Okay. So a few of you have. So for those of you that have, let me ask you to quickly take this test. This is the former instructor in me. Okay. So I'll give you ten seconds to make your mark.

Now, I'm going to make you write it down, but I'm not going to collect the papers. Okay? You have to self grade.

Okay. So let's figure this out. So is COBie construction handover data? Absolutely. This is my friend, Lyle. This is a basement of a room at Fort Lewis, Washington. The picture was taken in 2007. I'm sure that stuff is exactly where he left it.

(Laughter.)

MR. EAST: Right? So, you know, for those of you that haven't seen this picture, let me just mention that Lyle is an outstanding facility manager. You can tell that because the stuff that is there is all up on pallets because he knows the room is going to get wet. The stuff he really wants to keep is in the blue bins because he knows that the water is going to exceed the height of the top of the pallets.

(Laughter.)

MR. EAST: Ladies and gentlemen, this is funny and it's also pathetic. And it's in every building in every industrialized country in the world. It's pathetic.

So COBie is an internationally recognized data format and if you look up this crazy thing facility management handover aquarium or facility management handover model view definition, this is where you're going to find the IFC based format in this open ISO standard. And this is the official location for the COBie internationally.

COBie is also a building information model view that can be displayed in a variety of different ways. It can be displayed in this crazy format called step physical file format which is what you see in the back that's basically a way for computers to exchange information very efficiently.

Now, a human is never going to look at that and that's why I made a version of COBie that looks

like a spreadsheet. The data is exactly the same. The format of the data is quite different.

So that's an important thing is that although COBie has been described and examples are provided in spreadsheets, that's just there for us to be able to read it. But it doesn't matter what the format is because the information content of that stuff is the important thing, not the format.

Okay. COBie is also a platform to eliminate overhead costs on projects. And let me just introduce this slide by saying there's one way to look at a data standard that just says, okay, I'm going to give you data in that data standard.

There's another way to look at this whole activity and say, you know, if we have a different way of gathering the data to begin with, we can really save a heck of a lot of money.

And so in trying to answer that so what question or what's the business case question, one of

the critical sets of data that's in Lyle's basement boxes are all of the copies of all the electronic submittals that were approved.

So I said, okay, what happens if we have an electronic submittal process where we capture it before anything is installed and then we don't have to wait until the end of the project to get all that. And here's kind of what I came up with and this was based -- this started -- got kind of kicked off by an article in ASCE magazine. It was just a little article where a company said, hey, we use e-mail to do submittals and we thought it was great.

So, you know, we had this e-submittal program in Projnet, so we wanted to see what they had and sort of compare it. So I ended up doing this little model and it looked at like a CPM diagram of these various cases.

And, for example, the top one is subcontractor produced shop drawings that have to be

evaluated, and this is all for design bid build just for simplicity, subcontractor produced shop drawings that had to be evaluated by design consultants, right? So that's the most complicated kind of shop drawing.

And I did a CPM flow chart and then I classified the activities according to this Toyota quality management standard. And what they do is they take the CPM chart and they put the average times on it. And then they change the colors of the boxes and they show what's a value added task and what's a nonvalue added task.

And here's the classification of tasks in the submittal process. So there's things where you actually provide value. You add -- you do processing on that. That requires a human brain with some capabilities. There's routing tasks. There's handling tasks and transmitting tasks.

Now, you know if you're sending paper shop drawings that you're waiting most of the time for

things in the mail. So that's transmitting and, in fact, you can see on this top line that that purple to the right is the vast majority of the time required in these shop drawings is simply sending stuff around in the mail.

So if we look at the next one down which is e-mail, well, there's still some time sending it back and forth because sometimes it doesn't get to the right guy. So you have to maintain these e-mail lists and if somebody is not there, you have to send it over.

And this is what the people in that ASCE article told us when we interviewed them is that they still had a lot of headache having to do with this kind of management of e-mail lists and deciding who was going to get stuff.

And those of you that have done design reviews know that that's already been decided by the setup of the project. And so that kind of routing

activity and all of the transmission time is completely removed in the submittal.

And so maybe you're going to have some handling where you're going to take an electronic version and you're going to take the equivalent of the red rubber stamp and put on there and notify deviations and so forth. But, my goodness, you're not taking ten paper copies of twenty, you know, twenty sheets each and taking that red stamp down the table and then, you know, chicken scratching across it.

So it's fairly dramatic that using open information standards and thinking about getting the information when it's created can really take something that's a shop drawing that would normally take from cradle to grave of the shop drawing until you issue the order to go ahead and build a component. It might take 62, 63 days, but you could take that down to 14 days.

So, I mean, you want a business case -- my

guess is that any big project like the $500 million annex and housing in Kabul is at least going to have two sets of shop drawings on the critical path. I'm just, you know, going out on a limb here, folks.

(Laughter.)

MR. EAST: Okay. So you've saved two months on the project. I don't know what the extent of overhead on the project is, but you can do the calculation because that's your company's business, so just by doing something simple like having the standard data format and a standard way to process it.

So the answer is actually E. COBie is all of these things. Did anybody get E?

(Whereupon, there was a show of hands.)

(Laughter.)

MR. EAST: Okay. I'm buying you guys beers afterwards.

(Laughter.)

MR. EAST: Okay. So let's talk about

practically using COBie. I mentioned the submittal register as sort of a teaser. So it's one thing to have a standard and say, okay, instead of Lyle's paper, give us the COBie disk, but then you end up having to do all the same stuff you had to do at the end of the project except you're not putting it in a box, you're putting it on a CD and all of that.

So if you're going to get it all through the life cycle, how do you do it? We could spend a lot of time on all of these. I'm just going to briefly talk through each one and then I'll have a few more slides. And then we can come back to this if you have questions because I wanted to be sure we had enough time to have a talk about these things.

So step number one is that OBO is going to furnish COBie files for all your standard building. And I don't know exactly when they're going to do that, but I've seen them and they're good. And if you know David Hamas (phonetic), he's the guy that's come

up with these.

And the great thing about that is now you don't have to guess what the standard classification for the equipment that is required by State Department. You just load that file in and you can load it into Revit or you can load it into Bentley or you can load it into a Pneumo planning system or whatever you want because these companies have publicly stated -- well, we've had four public demonstrations and different companies have shown up at different times, but these companies have stood up in front of large public things and said they support COBie.

And if they don't, you call them up and you yell at them because you paid for the software, right? It should work. And I'll certainly help as we get this things started.

So now, when you guys -- when -- as the design progresses and we get a COBie file, then we can

use that as the basis to do design reviews, RFIs, bidder inquiries because you give us the information so we don't have to put sheet and detail on our comments anymore. We can put the exact objects they refer to. That's kind of an interesting thing, I think.

So then the next piece is because now we have the list of all the stuff in the building, I call that a submittal register, that's the list of all the stuff in the building. Of course, you have to have certifications and testing and, you know, product data and all of that stuff. But the COBie file directly links into the submittal register so that we have this type linkage between the model and the file and the resulting data that is required by Lyle. We use electronic submittals to deliver that information.

And in talking to a contractor that does work at University of Illinois quite a bit, when I talked to him about this a couple years ago, he says,

you know, Bill, the only thing that's different in what you're suggesting versus kind of what people could do today is that the guy that installs the equipment has to write down the serial number and the install date.

So I don't know how many of you like to do job crawls. Probably nobody in here has ever had -- well, you probably used to have to do them, right? But somebody has got to go through and get this at the end of the project.

So you guys can make a decision do you want to wait till the end of the project and capture all of this stuff when that's going to directly go against your profit, right, because it's the last payment in the project, or do you want to capture it as you go along and when it's installed, you can have the guy just write down what the serial number is? It seems pretty obvious to me.

So we have an application that you can use

in Projnet to allow you to do that. You'll eliminate your job crawl and so that's the fantastic carrot and the stick would eventually be if you don't give us the serial number, you're not going to get paid for the installed equipment.

I haven't seen their spec. You're going to have to talk to them about it, but --

(Laughter.)

MR. EAST: -- but that's my recommendation. So, you know, you can do the right thing for the right reason or the right thing for the wrong reason. You pick. So then that ends up getting us to the end of the project where people do start-up and shut-down instructions and all of this.

And when we first started talking about COBie three or -- two or three years ago, I had the opportunity to brief the team of designers and builders and commissioning agents and it was really interesting. The commissioning agents were the

most aggressively supportive group because they know that the start-up and shut-down instructions that they write in Word files go up on a wall and they never get used. And if they're here, then they can get directly imported into Maximo or TRIRIGA or ARCHIBUS. I'll say of those three, ARCHIBUS is the only one that's publicly done it.

We could talk about specific software at some other time, but I will tell you that the list of software that has publicly demonstrated production and/or consumption of COBie data is on that COBie page. Just Google COBie and you'll find all that software, the POCs, even movies about how to do it. All of the setup information is all there.

And then, finally -- now, I haven't convinced any owner to do this. My suggestion is nobody should have to provide construction handover data ever again, right, because if you do A through F, G is simply a report out of all of the data that

already came in?

So if this works really well, then in a couple years, no handover requirement. It's all there. You just check it as you go along. So simply do the work and the information flows. That's the whole idea. It's the easy button for BIM.

So what's next? So if you look at that stuff in Lyle's boxes, COBie is a big part of it. It's a room list. It's the simplest stuff that's already in your contract. It's the list of rooms and the list of all the scheduled equipment, the warranties and spares and the approved submittals.

But there's some other pieces to what's in Lyle's boxes. You saw a lot of drawings there. And if you've been in boiler rooms right after they've been commissioned, they have these beautiful laminated D or E size drawings up on the wall. And after about a month, those are all gone, right, because the guy that needs it has it in his toolbox?

So we want to have a format for the layout of all of these isometric drawings so that that comes in a standard format, can be easily created, used in 3D PDFs or whatever you want to use.

That particular format, its first demonstration was in December of last year at the NIBS annual conference. It's also called AEC echo build. It's at the Convention Center here in D.C. That's based on an ISO 5926 which is a FEA tech thing called XM Plant. And then the specifier's properties information exchange.

So when I first started getting into this building information modeling arena, people were saying, well, you know, Bill, it's all great, but it's never going to work until the manufacturers start providing their product data. You know, then you're going to be able to do a BIM.

Well, last December, we had a manufacturer you might have heard of called General Electric

provide light fixture data in this specifications properties information exchange format.

This year, the entire NIMA product catalogue will be able to be delivered through this open IFC based format. You can look at it in COBie. You can look at it in IFC. You can see it in ESPEC. And we'll have a demonstration of that and press releases will be forthcoming from NIMA and BuildingSMART.

So I think we're starting to make some in roads on that. But as you can imagine, that's a little bit harder than figuring out how to organize spaces and schedules and stuff like that since it involves 10,000 manufacturers and 400 associations and all of that stuff.

So we're doing that in a massively parallel way, but that's a whole separate briefing. So COBie is the first part of it, right? Room list and equipment schedules. It couldn't be easier.

Okay. So now let me take your questions.

Let me make sure I have time for questions. Do I have time?

MR. SCHMUECKER: Of course you do.

MR. NAMM: Okay. Okay. So sometimes people are shy, so who wants to ask the second question?

(Laughter.)

MR. HOCHULI: Let me, if I could. I'm going at the higher level because I'm head of resource management.

And the question I'd like to hear from the panel is, is there a ratio of IT investment to construction cost? I want to see how does our IT budget that supports things like BIM, et cetera, ties to what the private sector is doing.

(Laughter.)

MR. MULDAVIN: My understanding from BIM, it's only at most five percent of the service providers out there, even the good ones, are BIM ready and know this stuff. I mean, it's at a very

elementary stage in the industry. Again, I'm not a big (unintelligible). As a finance guy, it's a lot of interest to me because the most important thing to people that build and make decisions is reducing risk and forecasts and the whole integrated nature of things. And so I'm very interested in BIM has the ability to actually reduce risk which increases value. In my not exhaustive explorations is that we're still at a very, you know, preliminary stage in the private sector.

MR. NAMM: Right. Greg, unless -- thank you. And, Greg, please.

MR. GIDEZ: Yeah. I'd say that we're at a very preliminary stage in it. And as a -- from the contracting side, it's obviously all about risk management and being able to quantify the benefits of BIM are not evident.

I mean, intuitively you can say, yes, it helps. But how do you -- you know, for instance,

collision and clash detections. How do you quantify something that you avoided versus having to pay for the rework or the redesign? From a documentation tool from the architecture -- architect's office, it's a no-brainer as to why you would do it.

But my experience has been if the owners ask for it and the owners are willing to pay for it, industry is going to react and figure out how to do it the best way possible. So it's a top-down driven operation. It's not a grass-roots operation. BIM is not a grass-roots operation and neither is facilities operation management using tools like COBie. So it's got to come from the top. It's got to be a requirement and it's got to be compensated adequately for us to and industry to take it on.

MR. SCHMUECKER: Just for your information, there was a study completed by NIST back in '04 that tried to study this lack of interoperability and the results from them on the capital facilities industry

was that about 15 point some billion dollars were being spent for having a lack of interoperability. And this was out of about a $350 billion program. A seven or eight percent --

MR. NAMM: Wow.

MR. SCHMUECKER: -- savings are a potential, at least according to what NIST saw a few years ago. I suspect those numbers may change today.

The other thing I think that's helpful is there was a study completed on how much time a facility manager spends revalidating information, the very kind of thing Bill has talked about. And it can be up to 40 percent of a facilities manager's time is going back and collecting information that they should already have had they just saved it in the right format and the right environment.

MR. NAMM: Right. Now I ask very parochially -- and Bob Clark is at the table. Bob Clark is the head of our Office of Information

Management. I assume we're okay.

Bill, you mentioned TRIRIGA which is the --

MR. CLARK: We have made a commitment to implement this.

MR. NAMM: Yeah, right.

MR. CLARK: And the commitment is there. The commitment begins with working with Bill to make modifications to Projnet. With the framework of Projnet this year, we hope to have a fully operational COBie application that will allow the BIM model to be imported and married up with the submittal registers which are already being required to be submitted electronically.

We believe on the back end of that that we can start to produce an electronic transfer directly into TRIRIGA or the BMS product and that we can start to capture this with no rekeying. That would represent a tremendous step forward for us to get, you know, accurate information into our information system

and to get it at the point of construction, not necessarily putting somebody back in the field afterwards to revalidate and rekey it. And I think the commitment is from throughout the organization at this point to try and see this type of program successful.

MR. NAMM: Yeah.

MS. SHANAHAN: I would just like to say from a construction company vantage point, I think BIM, you know, it's probably five to ten, maybe fifteen percent and we've been talking about it at our industry off-sites for the last three to five years.

But you do see with the next generation of workforce coming in the ease and comfortability of technology platforms in terms of both efficiency as well as teamwork.

And so we've sort of added to our next generation of workers, you know, our company has done -- you know, we have a 25 percent capacity increase on

both production as well as just efficiencies because of the technology platforms.

You know, we're not using BIM yet, but just even where we've come from with just -- and it's great for team building externally where you don't have to all fly to a meeting. I mean, there's just huge amounts of capacity and efficiencies that come with it.

MR. HOCHULI: I'm just curious because I heard we'll do it if we're compensated and, yet, you're saying your company has already started down this route. I'm hearing conflicting statements.

MS. SHANAHAN: We're actually in -- we're actually, you know, contractors that are in the field dealing with estimates and projects and processes in times that we find that if -- you know, again, we've made, I'd say, significant investments in the last three to five years, but we've seen it pay off from an efficiency, our ability to bid more work, win more

work, be on a team, all the above.

MR. GIDEZ: Yeah. And I'd second that. We do it because we see a value in it, but there are a lot of things that are asked or are not asked that can be added value. And determining what information is required in the model is, until it is clearly defined -- you know, we can provide the thread patterns on the screws, but, you know, the amount of information would burden us so much that we couldn't do it.

I second that the millennium generation, we don't -- you know, they're expecting it and we train everybody that comes into industry now in using the technologies. And in five or ten years when they're the area superintendents or the project managers, it's going to be a no-brainer.

It's hard to retool the 30-year-old superintend -- or the 30-year experienced superintendent on how to use a BIM model, but that's where we got to work and that's why it starts early on

in education and is carried forward in the field.

Another point is the software vendors who make this software don't -- they're not contractors. They're not architects. They're not engineers. So they're guessing what you need. And a lot of it is more than we need or not what we need.

And so dialogue between industry and the developers of the software is really important. And we need to understand what the owners need so then we can communicate that back to the software vendors.

MR. CLARK: I think the other thing that's interesting to look at is for those of you who've read the Tipping Point, the question always is, at what point have we really hit the tipping point with this technology.

McGraw-Hill just came out with a recent analysis of BIM in the industry and it's a fascinating technical read to try and answer that question. And it's not a simple answer.

Curious enough, west coast architectural firms are ahead of east coast architectural firms. And architectural firms are ahead of mechanical, engineering, and plumbing firms. And certain industries are ahead of other industries. If you're doing -- so it's not a simple answer.

I do think that from State Department standpoint, we've benefitted from the requirement placed four years ago to do all of our capital work in BIM, not directly in the models that we're reusing on the other end, but in the quality of the construction documents that I've seen over the last couple of years. The improvement is clear in the architectural area. There's less conflicts and there are less problems associated with it. So there was intangibles associated with the requirement that we really have seen benefit to.

MR. EAST: I'd like to make a comment about the risk. I think one of the reasons why there's a

perceived risk about BIM is because people aren't asking for things in a way that anybody else could necessarily get a good understanding of what it is they're asking for, right?

So that's the reason why you make standards. Okay? You don't have to have a BIM to make a COBie file, right? You already have a requirement to give a valve tag list and an equipment schedule with serial numbers at the end of the project. If somebody wants to do that using Excel, they can, you know.

So we're just making it very clear that the information, especially in this first piece here, in this Construction Operations Building Information Exchange standard, is something that's already in existing contracts that you don't need special software for, that anybody, even the -- you know, the target, if you're -- you know, if you're building the $699 million -- it's staggering the size of these projects. Islamabad project, you have some

overhead in that project. So you can do some things, right? If you're building a barracks project, right, we added what, Kathy, about $150,000 for overhead there?

(Laughter.)

MR. EAST: So, you know, if there's a little risk, it's probably okay, right, in a project like that, right? But if you're doing the local school down the street, you know, your builder is a guy that's working out of the back of his pickup truck and maybe his wife answers the phone two hours a day, right?

So if we're really going to make this work, it needs to work for all of these projects so that that Lyle that works for your school district doesn't have to spend your tax money managing that building. It's really trying to focus on getting the -- so of the three initials of BIM, it's really that middle piece. And I have this slide that probably

would get me kicked out of the room here that says not everybody needs BIM, everybody needs building information, right? So the important thing here is reducing risk by making sure the requirements are clear up front. And I think we're going to have outreach and all of that stuff as we get into specific projects.

MR. NAMM: Okay. Thanks.

Okay. Any other questions, comments?

(Whereupon, there was no response.)

MR. NAMM: Bill, thanks very much. Appreciate you coming back. It was last year you were here, yeah?

MR. EAST: I was -- this is my first time at this big table.

MR. NAMM: Okay. But you've been in --

VOICE: We know Bill very well.

MR. NAMM: Okay. At another table then. But thanks for coming and presenting at this big

table.

MR. EAST: Thank you.

MR. NAMM: Dr. Bill or Dr. Checks.

And thank you, Brian, and thank you, Bob.

And let's move on now to our fourth and final topic which is fire, something that none of us want and we've got to prevent. And the head of our Office of Fire Protection is Bruce Sincox who's going to talk about what OBO is doing.

Bruce.

MR. SINCOX: Thank you very much.

When Jonathan Blythe first approached me with the idea that I should come and present for the Industry Advisory Panel, I gave him my standard no answer, no, I don't want to do this, no, I don't like to speak in public, no, they're going to be bored to tears. Everybody has experienced fire protection. What do I have to offer?

So after a relatively long exchange of back

and forth and to and fro, Jonathan did tell me that he would put me on after lunch and also would be the last one of the day. Therefore, most everyone would be tired and checked out by then, so I agreed at that point to put something together and take the opportunity to speak with you.

So thank you very much for that opportunity.

Everybody has experienced fire protection in some form or fashion whether it's in your business or whether it's in -- at a home type of situation. You've had the engines come. You had the ambulance come. You've dealt with the local Fire Marshal as he goes through the construction process and checks things out. You've dealt with the plan reviewers and the spec writers and so on and so forth right on down the line.

So lo and behold, how do we do that same kind of -- how do we provide that same kind of service overseas and what are some of the obstacles that we

have to overcome while we're attempting to provide that service?

Well, from the philosophical standpoint, our goal is to have or replicate to the best of our ability United States code standard in our properties overseas. Sometimes virtually impossible. Sometimes we have a pretty good hybrid between the local standard and what we can do to bring the U.S. standard into play. And sometimes it's just we get the full monty when we do the new embassy compounds and the new consulate compounds out there.

So it's a real mix of what we're dealing with in our properties overseas. So that's where I really want to talk about, not so much as how to do fire protection because that can be a very short subject with the audience that I have right here, but nonetheless how do we do it overseas? How do we make it work overseas?

So with that in mind, let me just give you

an idea where we sit in the organization and the bureau. We work for Leo Hession, the operations managing director. And we're one of five relatively diverse offices within the operations directorate. And under the Office of Fire Protection, we have an engineering division, a fire protection systems division, and a fire prevention division.

Now, we've given ourselves some wonderful swell titles that, you know, doesn't play well here. Let's just keep it simple. But we're all into engineering. We're all into analysis. We're all into all of those kind of wonderful things.

This is just a rundown of things that we do. Those are the activities, the primary activities in each one of the offices. And really truly all I really want to do with this slide is to show you the interrelationships between the offices themselves.

Of course, the engineering people, those are plan reviewers. Those are the people that travel out

to the sites and look at the construction activity as it's underway. They're the ones that go out when we acquire new properties, existing properties, and see what we're getting ourselves into and what kind of situations that we're dealing with and what can be done to make it as closely aligned to U.S. codes and standards as possible. And also at the end of the day, they're the ruling authority on any kind of code conflicts or code issues.

Yet, the relationship between engineering and the systems people, and you'll see that at the very, very top, it's the newest thing that the systems people do, it's the fire protection systems commissioning. We thought it was a bit one-sided if the engineers get to write the specifications, review all the plans, go out to the job sites, and then turn around and commission the same thing. It's kind of like the fox is indeed guarding the henhouse.

So how do you make that independent break?

Since you don't have a local government, you can't turn it over to a local government to go out there and do it for you since we're talking about properties that are ours while we're overseas. It's something we had to do.

So we decided that the engineers have nothing to do with commissioning pretty much just like that. Now, there's a handoff and, you know, the people that are going to go out and do the commissioning do indeed read all of the reports and are very familiar, very qualified to do the commissioning, but nonetheless they go out with an independent eye to what needs to be done.

So that's a bit of a separation. We don't ask the engineers to do the commissioning. We ask the people that are actually going to use and maintain the systems to do the commissioning so they know what they're getting themselves into.

That is the newest number one priority that

they have. They also do fire protection systems upgrades. They provide technical support to every one of the missions for all of the fire protection systems that we have. And we've become basically a spare parts repository.

Everybody knows you can't put a simplex piece of equipment in a Notifier panel. Vice versa requires the same thing. So we're the ones that end up buying and supplying all of those bits and bobs and pieces and spares out to the post. And sometimes it gets a little bit interesting depending on how we have to get it out there, what broke, how timely we can be with our approach and so on and so forth. So --

MR. NAMM: No more lithium battery --

MR. SINCOX: We will get to that.

MR. NAMM: -- smoke detectors.

MR. SINCOX: I have a fix for that. I think you'll appreciate that further down the line.

But, yeah, it's those kind of things Adam

alluded to. Some things you just flat out can't ship. You can't get it by air. In order to ship it sometimes, it has be done by a registered hazardous materials handler and it gets pretty doggone pricey once you start drawing in all of these different factors. So there's a lot to consider when we're talking about those things.

And then the prevention people, I consider that our core function because what's discovered, what is recommended from a visit that we attempt to do every two years really drives the other chains -- trains. It talks about what type of systems upgrades we need, what kind of spare parts, what kind of shape they're in. And indeed they find some things out there that posts might have done that makes the egress a little more difficult when we turn the building over to them. Let's put a set of doors in the middle of the corridor. Let's go ahead and put a locking device where there was not one before when we

were out there doing the commissioning. So they're the people that drive the train and I'll cover them last, the engineers.

And just some wonderful pictures of some construction sites. Everybody loves to see that exit sign. Basically what they're all about.

The thing that is different from what you've experienced perhaps or what's the norm here in the District of Columbia or Arlington County or any of the local jurisdictions around here is the site surveys and the progress inspections if you go out.

Everybody knows that if you have a full set of drawings that's been approved, equipment submittals for the most have been approved, how it's installed and how it's put together makes all the difference in the world. And we know we're dealing with American contractors, but we know that most of the time the labor force is either local or third country national.

And some of the things we ask them to do,

particularly in the fire protection systems, a little bit complex at times and not so complex because, yeah, it's a sprinkler pipe and, yeah, it's a wire run, but when you throw in some of the security aspects and elements that we demand because we have tenants who have different spaces in there or we have to have some kind of dielectric break between the -- one space to the other, it gets a little bit difficult and a little bit dodgy.

Sometimes it's so simple that you have panduit (phonetic) heads in the upright position and vice versa. That's pretty simple to fix. But it happens all the time.

So you're not just out there being your co-compliant commando, clipboard commando. You're out there teaching so that the next time you're dealing with that particular contractor in that particular part of the world, you may not have to go down that teaching path again. And that's the big, big

difference to what we do.

Our people are look -- when they come out to the field, when they go out to the field, they actually -- the reports they leave behind are used to teach their people what's wrong and how to fix it. It's a pretty detailed list of corrective actions to be taken and it takes some time. And it's just one of the things that we have to deal with that you would not necessarily expect to deal with back in the states.

I talked a little bit earlier about the engineering aspect of it in the newly acquired buildings. It's probably our most challenging task that these people have to do because, as you know, you basically, when you put it together, you got what you got.

And not all the building codes around the world -- this is a shock to everybody -- not all the building codes around the world come up to U.S.

standards. It just -- so basically you have to take a look at the risk and figure out how to manage it. That's what it's all about.

When I say -- when I'm talking about equivalent levels of fire safety, you're never going to make it fire safe, but you can manage the risk to a certain extent.

Some of the things that you really truly want to have, a second means of egress, a fire protection system, particularly in a high rise. Our friends in security want us to have not necessarily the vista view but the one that's furthest away from the street. When you have one exit, we would prefer it be closer to the street so that they don't have quite so far to go.

We would also prefer the stairs not wrap around the elevator and it be open from ground floor to the 17th floor. You don't always get that.

So it's up to the engineers to figure out

what's acceptable, what's not acceptable, and come up with a mitigating step or abandon the property totally. It's the hardest thing we do. It's probably one of the things that if you're looking at a crystal ball, there's a lot of work that's done with the crystal ball so that you have a comfort level before you make a recommendation to either move forward and occupy or put together a statement of work on what you would want to have in the building.

We go out there. We visit Dan's people somewhere between 40 and 60 percent of the construction site. It gives us an opportunity to see things before walls get closed up or things are too far down the path if it's not going in the right direction.

We also get to approve the shop drawings, somebody was talking about that at the last presentation, and make sure that the design drawings were translated and coordinated with the rest of the

systems out there so we don't have the HVAC system blocking the sprinkler head or we have a fire detection detector that is accessible for maintenance and not covered up by runs of conduit and so on and so forth.

And the most important thing they do is they make the final determination when the project is ready for the systems people to go out and do the commissioning and the final acceptance testing.

The systems people, not fire protection, necessarily fire protection people, but very extraordinarily qualified people in their field. They're technicians. Some have been security techs. Some of them have been sprinkler techs who don't necessarily have that real fire protection background that I have riding trucks and chasing down ambulances and so on and so forth, guys absolutely brilliant. That's -- this is -- this was their number one activity before we picked up commissioning.

When you took a look at how many systems we have out there and how many different systems we have out there and the age of the systems that we have out there and the limited resources that we have to maintain them, it is really swamp gas and mirrors on how they get things done. It -- we want to keep them up. We want to keep them running and it takes more than just a little bit of work on their part to make it happen.

There's seven of them. They're out traveling probably 60 to 70 percent of the year just going from post to post fixing things, changing things, upgrading systems. And, oh, yeah, by the way, I just levied them with the fire protection systems in new embassies and all of the renovated spaces because I didn't think they had enough to do at the time. So very, very important.

How do we keep the systems operational? It's difficult because for the most part, the people

that we have out there to maintain the systems, and I'm not talking about the facility manager, but the people -- his staff are the ones that helps us keep the systems in operation. And it's getting harder and harder and harder because the systems are more complex and there's more licensing and proprietary information as we put the systems in.

But this is how we attempt to do it. For every facility manager that comes through, he gets -- he or she gets three days of intensive fire protection systems maintenance. And we're not asking them to do anything more than figure out how to maintain it, how to push the button, let me know when the red light is on, when the yellow light is on, when the green light is on the panel, inspect it on a regular basis, and test it on a regular basis. That's all we're asking them to do.

More than that, it's probably passed their capability of doing that. We do provide operational

training for the Marine security guards because all of the fire protection systems report into a post one or wherever they have a local guard if there's no Marine security guard in place.

So they've got to know what they're looking at and what they're reading. We have to make sure they don't try to reset the system with the end of their baton as they're want to do when something bothers them.

Maintenance activities, we have to go a little bit further than just relying on the posts to take care of themselves or stretching seven people around 260 locations around the world. So we are part and parcel of facility manages -- facility management's International Maintenance Assistant Program.

We have an element in there that deals specifically with fire alarm maintenance and we task them to go around the world to those places that have

the most issues, and that for the most part has been Africa, and help keep those systems on line.

They put -- they do the full check of a system. They fix what they can fix. They report back what they can't fix and they train the locals to the best of their ability.

We're just on the cusp of participating in the building maintenance expense contracts that facilities management is kicking off. We have made our input into that particular initiative to see if we can get some different pots of money where the posts can actually go out to a contractor and bring -- a local and if there's a local that's qualified to do so and take a look at the fire alarm system or the sprinkler system or the fire pump to see if it's running and change the oil, the things that you would want to have done at least on an annual basis.

And the third thing that is really in its infancy, but some of the local employed staff are so

smart and so sharp that -- and have the proper certifications, we sometimes just task them with the blessing of their management staff to fly around the region and help us get some of the big ticket items off of our radar screen.

There's a very wonderful young fellow in Nairobi that we task all the time and it really costs us nothing more than his per diem money and his travel expenses. And this young fellow goes down there all over Africa and does our work for us. And we're most appreciative of that.

We have somebody else in Europe who may be able to do the same thing once we get him through the proper factory training. So it's working that way as well. Just one more asset to try to draw upon when we have maintenance activities in certain parts of the world.

MR. NAMM: Bruce, let me jump in. That second bullet there, we were talking a little bit

about ICASS this morning and the bureaus, when we were talking about energy savings performance contracts, the bureaus pay utilities and other what we call building operating expenses, BOE, okay, the utilities, gardening contracts, cleaning contracts, et cetera. Okay?

OBO decided about two years ago now to start funding the State portion, about 70 percent that is the State presence overseas, the other 30 percent is other agencies, the State portion of what we coin, we coined the term BME, building maintenance expenses. Like fire systems, these are other service contracts, generator maintenance, elevator maintenance, et cetera.

Why, because it's in OBO's interest that those big systems don't break down because if they break down, I pay to replace them. So this is -- we were talking about the utilities. That we're not picking up. No plans to pick that up. But these

building maintenance expense issues or service contracts, we are paying the State portion, about 70 percent of those, and relying again on other agencies to pick up the other 30 percent.

Okay, Bruce. Sorry to interrupt.

MR. SINCOX: And we just want a piece of that, so we're working with facilities management to make that happen.

This is what I consider our core activity. If everything else went away, if we had -- we lost our ability to maintain or we have no more engineering responsibility, this is something that has to go on.

When the office was created 30 some years ago, this is where it started. It started to work on get people out there, teach fire prevention, sell fire prevention in the field because we had some horrible losses back in the '70s.

And Secretary Schultz put together a group of professionals from industry, a couple of them from

the hotel industry, to come up with a recommendation on where State needed to start. And this is where it started.

It started with getting qualified people into the field, visiting the different locations, and teaching people how to prevent fires, what they can do to -- for themselves what needs to be done, what needs to be identified for FBO and OBO to make the buildings safer.

It's evolved. It's gotten larger. It's gotten bigger. I think it's gotten better and certainly it's gotten more professional as time has worn on and sometimes even smarter.

The picture of the fire right there, I just want to toss this out because this to me was a big deal a number of years ago. We attempt to train every Foreign Service officer in the use of fire extinguishers before they go out into the field. It's a very laudatory thing. You get them out there. You

-- we were using Quantico Marine Base for a while as our point to do that.

And were also trying to get the Marines while we were down there to go through the same type of training because at one time, over half of the fires that were experienced in the field were being handled with hand-held fire extinguishers. So if you've got something working for you, you go with it and push it.

Well, it got a little onerous both, you know, environmentally and liability-wise to continue to do live fire training here in the states. Nobody wanted the runoff. Nobody wanted the liability of having someone hurt on their property, so on and so forth.

So we had to come up with a plan B. And what we came up with was a simulator that really mirrors what kind of fire we would experience out in the field. And it's a nice little computer driven

program that you can set to nine different settings, real simple to real hard, and three different scenarios within that.

That basically you would have to point this laser light at the screen and put the fire out. If you used the wrong technique, guess what? The fire does go out. And it's not the easiest thing in the world because when we were testing it, I had all of my 20-year professionals there just, you know, waiting to go at it and some of them had to go ahead and eat a little crow because they couldn't put it out in the time that it allowed them to.

So it's not the easiest thing in the world. The big, big benefit, though, is that if you don't do well with the simulator, you can do it again and again and again and again whereas when we were doing live fire training, you were limited to one shot. That's not really reinforcing when you don't do it right the first time.

So you get it, in the states, you get it until your heart's content and if you give it to a bunch of 18- and 19-year-old Marines, they can make a competition out of it, which they do, and then, you know, it becomes a game, a game with a good ending.

So that's one of the things that we implemented that I think has paid us back more than before and on top of that, Jurg is pleased to know that I went ahead and cut out a $60,000 a year contract. Spent a little bit of money up front and saved money in a contract. And he always smiles when I tell that story because he likes to save money.

This is basically what they do. They perform fire inspections, investigations. You can read all that kind of stuff.

Let me just put it this way. We are not a code enforcement type of operation. That's not what we do. We're not clipboard commandos. We're not the engine company that comes in there and runs rampant

through your facility and just decides what to write you up on. It's not that at all.

We identify things that need to be done. We want to identify the hazards. We want to identify the maintenance actions. We want to identify the deficiencies and we do all of that.

But basically because we're only out there for about four or five days every two years, there's really no leverage. You can't go out there and mandate that some things be done if you're not there but four days.

So consequently the role of our people is to go out there and identify, tell them how to fix it, and then come back and help them fix it. That's where we really make our money.

The last bullet up there is key to the whole operation. If there are deficiencies with the buildings out there that we find, we don't leave it to the posts to send us a report so we can put it in a

database and it sits there and cooks on forever and never gets done.

It's my people who put the deficiency in the OBO database and then push it through the area manager, our Foreign Service component in the operations directorate to make sure that it gets addressed, whether it's stuff that posts can do themselves or it's part and parcel of another renovation project. That's what it's all about. It's to make it that safe.

Hazards are easy. People can fix hazards instantaneously out there. Put a light in the exit light. While it lights up again, hazard gone. Do some of the maintenance actions, check the fire extinguisher, put a tag on it, maintenance action completed.

But it's the big stuff that seem to be overwhelming at times that people just won't deal with, too hard, too complex, and no oversight. We'll

wait for the next guy to come through in two years because I won't be here.

Well, we can't live like that. So what's why we do what we do. It is a salesmanship job, not a code enforcement job that we deal with out there.

I want to tell you a short story about residential smoke alarms because that just looks so doggone simple. Big deal, Bruce. You've done a great job. You bought smoke alarms down at Home Depot. You bought fire extinguishers, blah, blah.

And if you've taken a look out in the hallway, you know those wonderful green photoluminescent signs that all the architects like, that's what I give to the posts out there as well when they don't have the right kind of exit light out there anyway.

But smoke alarms, you would think that's as simple as pie. Not overseas because first of all, you well know that it should be driven with electricity.

It should be hooked up so that with one sound, it sounds throughout all of your residence. Can't do that. Too hard. Can't figure out what kind of electricity to use, so on and so forth. It's all over the map. Is it 110 here? Is it 220 there? Is it 240 there?

Impossible to go ahead and provide posts with what they need. And Lord knows you don't want to give the posts the money to buy what they want to buy downtown because they always buy the cheapest junk, so they really haven't done anything for themselves.

So my office has been providing residential smoke alarms for the 20 some years that I've been here. We pass them out like Carter has little liver pills and they're fine. They do a great job. They wake you up when you're asleep. That's what they're supposed to do, make you take action.

And then with the advent of lithium, we thought we were home free because the biggest

conundrum after providing them is how do you provide a battery when they run out, you know? I hate fire prevention week. This is so much, you know, terrible for me to say, but I hate fire prevention week because they say change your battery, change your battery. And I'm praying that nobody overseas is paying any attention to that because they will change the battery and for the most part put the wrong battery in.

But I'm the guy that's got to go ahead and provide them batteries. So I'm doing a great service. I had -- I provide more batteries than Radio Shack. Okay? I'm shipping them out there and I'm providing you -- every year, I'm providing you a battery to go ahead and put in your smoke alarm.

Well, here comes technology. Here comes a ten-year lithium smoke detector. Well, so the smoke alarm is good for ten years and now all of a sudden, my power supply is good for ten years. I've got a home run. I'm shipping them out. We make this big

change of program.

We get them all out in the field and then we find out that because of Department of Transportation rules and regulations I can no longer ship lithium batteries in aircraft. How do I get them from point A to point B?

Well, I can acquire the services of a hazardous materials person to put the shipments together for me, certify that they're there, and he or she has got to provide them to the airlines and they may go out on a UPS or one of the airlines, but it can't go out with a passenger aircraft.

So where they go all of a sudden, I'm limited as opposed to the pouch that we've been sending them through for all these years. We basically ran out of ideas on what to do.

So we took a giant step backwards and now we're passing out Radio Shack's alkaline battery once again to the field. So this is a surprise to Adam.

This is what I decided to do henceforth.

Throw the slide up.

This is what we're going to do to change the conundrum with the residential smoke alarm and rest assured, the popping will eventually wake you up.

(Laughter.)

MR. SINCOX: And you will have a snack to eat while the local fire brigade who basically are there to save the foundation and chimney from collapse can extinguish the fire.

So I jest, but it was a conundrum. It's -- the resolution isn't what we wanted, but nonetheless we still have residential smoke alarms in our home in the right quantity and in the right places.

Thank you.

MR. NAMM: Bruce, I'm asking because I don't know. Do we have many smoke detectors around the world that are wired with a backup battery?

MR. SINCOX: A few. None that we're

provided. You know, when we build a lease like Haiti --

MR. NAMM: Yeah.

MR. SINCOX: -- and that kind of stuff, you can get them in.

MR. NAMM: And, of course --

MR. SINCOX: Yeah.

MR. NAMM: -- if you do that, the power supply is not reliable in a lot of places.

MR. SINCOX: No. No.

VOICE: Moscow is wired.

MR. NAMM: Moscow is wired? Okay.

MR. SINCOX: Yeah. So, no, they're few and far. We're still on the trailing edge of technology as far as that stuff is concerned there, but it's tried, true, and tested, so -- investigations, thankfully we don't do a lot of investigations from Washington. Every fire is investigated, but thankfully my people do not have to go out because

they don't hit the criteria. They don't hit the trip wires for those kind of events.

This is when we would go out and thankfully none of that comes. One or two a year perhaps. More often that not, one every two years that we have to get out there and do that for those kind of situations. And more often than not because they're the post operations being adversely affected as opposed to arson or anything else that goes along with that kind of stuff. And even injuries have been few and far between you find.

This is just the world famous pie chart on where we've experienced fires since I -- we've been keeping data. And you can see that for the most part, it's been in residences. It's been like that forever.

The one telling tale, though, that the 22 percent for the office building chancery, that used to be pretty doggone high, a significant number. But since the construction of the NECs and the NCCs, that

has dropped off the radar screen. You just don't experience that.

So I've gotten -- our program has gotten well just by virtue of standing back and watching Dan build buildings to be honest about it. It's made a lot of the problems go away.

They talk about consolidation, talk about security. I'll talk about fire because that's huge. That's huge.

VOICE: (Unintelligible?)

MR. SINCOX: No. It's 22 percent all across the board. It's dropped down dramatically. On a yearly basis, it was like 35 percent of the fires were in the chanceries. And this is how they are by region. And somebody pointed out to me you might not know what all of the regions call for.

But the one I wanted to point out more than anything else is the 31 percent in Africa. That's the red in the list there. That's where we have had the

problems since the beginning of time. Africa has about 50 posts and they've experienced over the course of time 31 percent of the incidents out there.

So when you talk about 50 posts out of 260 and you've experienced 31 percent of the incidents, that's rather high. And most of them were electrical in nature. Now, that, too, has fallen down because most of the fire -- most of the new embassy compounds and stuff or a fair majority have been in Africa.

So we're putting out better buildings, bigger buildings, more robust structures, real good electrical supplies with backups, and it cuts it right on down. So now Europe is in the lead to a certain extent.

MR. EVANS: Do you see any correlation with those thermographic scans that we've been doing on residences?

MR. SINCOX: Yeah. That's a good preventative tool that we have out there. Part of the

IMAC contract that facilities has has a thermographic scanner and when they're sent out to a post, they scan everything. It doesn't matter if it's owned, leased. If we occupy it, they go through it. And they fix a fair number of incidents that are just on the cusp of becoming a real problem for people out there. So that's paid for itself in spades.

MR. NAMM: Bruce, why do -- that's Europe that's the 40 percent?

MR. SINCOX: Yes, sir.

MR. NAMM: Why is that so high?

MR. SINCOX: I think that --

MR. NAMM: No more posts but not -- I mean, compared to east Asia, EAP, east Asia pacific, or --

MR. SINCOX: Well, I think -- is anybody here from -- nobody here's from those two bureaus?

MR. NAMM: No.

MR. SINCOX: I think they lie a lot out there. They don't report anything.

MR. NAMM: Okay.

MR. SINCOX: Okay?

MR. NAMM: There you go.

MR. SINCOX: Yeah. I think there's some under-reporting in all of that, but Europe used to be a little bit smaller but not anymore, not with Africa dropping off the way they are.

MR. NAMM: They're reporting better?

MR. SINCOX: Yeah. And there's really no harm in reporting anything because what you do with the information you get, you're just not driving statistics, you're taking a look at the effectiveness of your program and if you have a trend that could be handled through a training function or program, you adapt and you adopt your training program or if they need more help, you send more people out there into the field to help them.

So that's the goal behind it, just not to keep statistics, but certainly Africa has gotten a lot

better. Europe has taken up the slack from that. But it's not critical.

Now, when you figure how many -- how many posts there are in Europe, there's like 79, and that's quite a bit, 79 of 260 are in the European region, something like that.

One of the small things we do, and I won't do anything more with it, I'll just point it out to you that OBO has the responsibility to handle any facility related emergency around the world regardless of whether it's fire, flood, pestilence, you name it. We're -- it's ours to take care of the facility, to put the mission back in the operation.

It's not a big function. It doesn't take a lot of our time. But when something happens, for instance, the Port-au-Prince earthquake followed quickly by the Santiago earthquake and just recently the Kingston flood, my office is the one that pulls together all the players in OBO that can help put the

post back together again.

We don't have the individual expertise in the office, but we can draw from facility managers. We can draw from construction engineers. We can draw from real estate professionals. We can draw from all of the talent in OBO and we're just a facilitator for that particular role.

Design engineering has got a natural hazards office and we just draw on them all the time to go out there and help the posts put the pieces back together again. And we just run that. So it's something that I toss out there, just something that we do.

And the reason we do it, because most of the people that I hire have emergency or incident command experience and that's what it takes. In the first couple hours of any kind of incident, you need somebody who knows where to find the check list and run it. And that's what it's all about.

So with that, let me open it up for

questions, if there's any, or comments. I would appreciate it.

As I told my colleagues in construction management last week when we were -- when I was asked to speak with them, if I know the answer, I will share that with you. If I don't know the answer, I will make one up as I go along and you have to figure out when I'm lying.

MR. MINER: Bruce, to what extent do you have to coordinate with local firefighters?

MR. SINCOX: That's interesting. Thank you.

We go to -- any time we visit the posts, we go down, we visit the local fire brigade. And we do that for more than just a courtesy, although we bring our little chachki and we exchange gifts and so on and so forth with them.

But basically we're eyeballing what they've got and what they can do for us. It's really simple to see if the fire truck is up on jacks and it doesn't

have a wheel on it that they're probably not going to come when you call the equivalent of 911. So we make those value judgments when we're out in the field and it -- and sometimes it leads to bigger and better things.

Sometimes if it is somebody that's operational and wants to get in and take a look at what they would be facing at the embassy compound, we'll put them together with the management counselor, the officer, and the regional security office, the RSO, out there to arrange a visit and just let them look at what they're going to face when they come through the gates because that's all they see. They see the gates.

Tokyo does it with regularity. They get the fire brigade in there.

So you have a relationship. You know what their capabilities are and they have some idea of what they're facing once they get inside, although that's

very controlled as well.

So thank you, Bill.

MR. RODGERS: Who develops the disaster recovery plan? I know you program manage it, but who develops it?

MR. SINCOX: The individual offices that would have the responsibility to put it together. For instance, I'll toss it right back to Bill Miner back there, but with the earthquakes, with the floods and so on and so forth, he's got a seismic group that puts together on what they need. I know he has some definite delivery, definite quantity contractors on board that are there just to task and get down and assess the situation.

We use construction engineers and facility managers that are in the region. If you have a construction engineer, don't send him from Washington. Send it from X, Y, or Z over there to do the same kind of -- just an assessment of what is necessary and then

we can work from whether you need equipment, whether you need money, whether you need the technical expertise down there.

So that really -- you know, I'm sitting around just saying you, you, you, you. But at the end of the day, it's each office that has that expertise develops what kind of response that they're going to make to that.

MR. NAMM: Let me make a general comment speaking as a member of the Foreign Service. Foreign Service faces hazards overseas that you don't face here, unhealthful conditions, which is the reason that there's a retirement age in the Foreign Service. Unlike the Civil Service, 65 is the mandatory retirement age. And then obviously terrorism and bad driving and all the other things that we face overseas.

But I think that the program that Bruce has is about as good as it can be.

And from the time that I was a first, second tour officer, General Services officer in Dominican Republic and in Dharan, Saudi Arabia, his folks do come overseas. They set up the training and you get out the fire extinguisher and you learn how to use it. And it's absolutely invaluable, I think. It's knowledge here, but it's also muscle memory, how to put out a fire. And luckily I've never had to do that overseas, but it's important stuff. It's really important stuff.

MR. SINCOX: And I don't like to be statistic driven because it's not as though my house was on fire. I have real leverage to control and how many incidents are reported back to OBO. But when I started into this job a number of years ago, we were averaging between 65 and 75 incidents reported back to OBO.

And when the trend started to drop down, I held my breath for a while because I just was figuring

it was just a blip on the radar screen. But in actual fact, for the past seven years, we've been averaging between 40 and 45 incidents.

And when you take a look at the number of properties that we have, the fact that so many are leased, so many built to local code if there is such an animal overseas, I think that's pretty good. It speaks volumes.

And the dollar loss, although if you had to pay for it out of your back pocket is significant, at the end of the day, dollar loss per fire is extraordinarily low. And that's because you have people that know what to do when something happens. They're not afraid to pick up the piece of equipment. They're not afraid to use it and they know when to put it down and get the heck out of the way. That's why we don't hurt anybody or kill anybody out there.

So it's a big deal. I find it pretty effective.

MR. NAMM: Other questions, comments?

(Whereupon, there was no response.)

MR. NAMM: Okay. Bruce, thanks for your excellent presentation.

Let me -- I've got a couple of presentations on my -- of my own to departing panel members and then we'll wrap up.

And before I get to the presentations, I want to thank a few people, Jonathan Blyth who is behind me here, Christy Foushee on keyboard over there for the excellent work putting together this Industry Advisory Panel. So thank you.

I want to thank Ramsay Stallman and his -- the team of OBO escorts who have done good work here today.

Thank the reporter back in the booth as always.

And by the way, I should have said at the outset we're in the UN style conference room at the

Department of State, so you see what are there, 12 different booths. So we could have done this -- maybe next time, we'll do it in 12 different languages. And, of course, we've got the Chinese book so we can start with that. So we'll see you back in April.

Let me open it up. Are there any general -- and I'll open it up to anybody in the room. Any questions, comments on any of the presentations today?

As I said, we will be coming to you in March and asking for suggestions for the April IAP which will be dominated by design excellence, but presumably we will have time for one or two other topics.

But let me open it up, panel members, anybody who has anything they want to say.

VOICE: I'm just --

MR. NAMM: Yeah, please.

VOICE: I'm just so excited about this and making our embassies a lot more energy efficient, the green (unintelligible) and the State Department --

MR. NAMM: Yes.

VOICE: -- for our buildings. So thank you.

MR. NAMM: Good. Good.

VOICE: That's great. We can set a great example abroad and all that.

MR. NAMM: Thanks for that.

And somewhere -- that's a smaller version it looks like of the green guide, yeah, yeah. We got a little bit thicker book that's our green guide which includes everything from building features to transportation, carpooling, et cetera. So it's important and that's why we put it together. In fact --

VOICE: The web address to the green guide --

MR. NAMM: Yeah.

VOICE: -- is on the back of the brochure.

MR. NAMM: There you go, the on line version, which is a way to be more green. We're not

handing out the papers, look at it on line.

Any other comments, questions?

MR. CASTRO: Adam, if I may.

MR. NAMM: Please.

MR. CASTRO: Bob Castro with PAE, a Lockheed Martin company still.

And it's great to be back and see so many friendly faces after my ten years at OBO, three years away, but still in the Foreign Service family where I get to live in these structures and all the service you all provide.

It was great to hear Lydia's update on design excellence. I would say one of the things that PAE which provides operations and maintenance in more than a dozen locations of U.S. embassies and does construction services as well that's been brought up in the panel in the past is design build operate as a model where you get the ultimate operations and maintenance involved earlier to discuss total cost of

ownership or total cost of operation. I think we have an interest in that.

And then to thank Bill Miner and Dave Shaffer I think has left. On the Lockheed Martin side, we are one of the ESCOs and have been working successfully, I think, with that office certainly since Ambassador Rifkin's (phonetic) great League of Green Embassies Conference earlier this year.

Since Under Secretary Kennedy signed the MOU almost two years ago, we've been eagerly anticipating the task orders coming out and anything we can do to help accelerate the ability to do that and even entertain again some of the contractor initiated options, particularly where we're already doing that kind of work on site for OBO would be -- anything we can contribute to help move that along and get more of those task orders out.

I know the initial commitment was hopeful in the sense of dozens per year. Anything we can do to

help ramp it up to that, I think we'd be eager to contribute to.

MR. NAMM: Yeah. And Janet and I were talking about this more at lunch. There is this bifurcation, as you know, where the ICASS Council, that is the regional bureau and other agencies, pays the cost of utilities and, therefore, is the responsible party, if you will, for paying off ESPCs.

And we have advertised them. I mean, we sent a cable to all posts about six months ago. I have and will be touting the ESPCs both with ambassadors and at conferences, Department of State management DCM conferences at which I speak. And we'll keep looking for ways to move forward.

Dave Shaffer who was with us this morning mentioned Valletta which is one place where the ambassador has been very involved. And that's a new embassy build and we didn't have money in the project to do photovoltaics. And we're exploring an energy

savings performance contract for Valletta. And we'll look for others and look to go forward.

So thank you.

Other questions, comments?

Please. If you could turn a mike on. There you go.

VOICE: I was just wondering what's on the board for fiscal year 2011.

MR. NAMM: What projects are on the board? Marcus is the -- Marcus is opening his book.

(Laughter.)

MR. HEBERT: Unfortunately I didn't bring the list with me. But we do have a major NEC in Bishkek that the RFP is getting prepared to be put on the street in the next week.

We have Oslo, I think Rabat. We have Moscow. Beirut is coming up in FY '12. I think Newatchot (phonetic). We have something in Sanaa that's on the list and the Muscot (phonetic) MSGQ is

actually on the street as we speak.

MR. NAMM: Yeah.

MR. HEBERT: Those are what I could write down. I can't remember the others off the top of my head.

MR. NAMM: I think that's a pretty complete list. Jakarta 12.

MR. HEBERT: Yes.

MR. NAMM: So a lot coming up. What else?

VOICE: Abuja (phonetic).

MR. NAMM: Abuja, the restart of that annex is 12. And a comment on that. We are trying to speed up or not speed up isn't the right word, but move up the process so that we can award more of the projects before the very end of the fiscal year.

And that's -- Marcus is smiling because that's -- it's a difficult process because, of course, his folks who have been -- who were planning the projects for award at the end of FY '10 obviously

can't start on the FY '11s, couldn't start on the FY '11s or get into them as much as they would have wanted to until the '10s were awarded.

Marcus, you want to make a comment?

MS. MUNIZ: He's procured a list.

MR. NAMM: He's procured a list. Okay.

MR. HEBERT: Thanks to my teammate, Jay Hicks.

MR. HICKS: Remember the list begins with me and then it migrates. I carry the list.

MR. HEBERT: So certainly I forgot about New Delhi. We have a New Delhi annex in FY '11 which will be a big project as well as Vientiane NEC.

VOICE: I have one comment I'd like to make.

MR. NAMM: Hold on one second, please.

MS. MUNIZ: Let me just add -- sorry. These are just our new embassy compounds, so we have major rehabilitations that haven't been touched on and other smaller projects that go on around the world.

MR. NAMM: Yeah. And let me -- yeah. Helsinki despite a lower level of maintenance funding than we'd like, we were able to put together enough scraping from a few different accounts to do an upcoming 80 plus million dollar major rehab of Helsinki, our embassy in Helsinki. And that's coming for award in FY '11.

Helsinki fire safety issues, other issues has been at the top of the major rehab priority list for about 25 years if you can believe that which is an indication of our dearth of maintenance and repair funding.

And we've talked at this forum before about the long-range overseas maintenance plan which Jay Hicks put together which catalogues $3.7 billion, about half deferred and half projected to maintenance needs over the next five years. We can't do it all, but we're happy that we'll be able to do Helsinki starting in FY '11.

Sir.

VOICE: Well, what came to mind when you're talking about needing capital to fund operations and maintenance types of savings, would you consider establishing a life cycle cost revolving fund where you take a small percentage of the annual savings achieved, two or three percent, five, whatever you determine, put that in a fund to fund other capital projects which would give you more savings?

You might need legislation to get the appropriation authority to do it, but I think that's something that you should look toward. That would give you a viable source of revenue for money already saved.

MR. NAMM: Right.

VOICE: It would leave the bulk of the money with the project manager that delivered the building. But I don't think anybody would object to taking a small percentage of savings, building up a life cycle

cost fund --

MR. NAMM: You're talking energy savings?

VOICE: Yeah. Energy savings, maintenance savings, any savings they have. To do that and put it in a pot that's a revolving fund, to use the fund other places that you want to implement an idea to achieve more life cycle cost savings.

MR. NAMM: Yeah. I think it's a worthy idea. On the energy savings side, the -- there is this division where it's not our money. It's not our money. Energy savings accrue to the regional bureaus of the State Department as well as to the other agencies.

Maintenance savings, I'm not sure what you mean by that.

VOICE: Well --

MR. NAMM: Mike, please.

VOICE: Well, on the energy savings, I don't care who they're accruing to, if you passed a law or

you got an --

MR. NAMM: Sure.

VOICE: -- appropriations act or whatever --

MR. NAMM: Yeah.

VOICE: -- everybody has to throw a little bit into the pot. They've gotten the capital. They've gotten the funding. They're getting all the savings. Leave them with 95 percent of the savings and drag off that five percent --

MR. NAMM: Yeah.

VOICE: -- and put it in a pot. Then you're going to have something that's going to perpetuate itself. People are going to know that there's money available when they have a good idea to make more energy savings.

MR. NAMM: Right. Thank you. Let us take that in board and let's look at it.

Other comments, questions?

(Whereupon, there was no response.)

MR. NAMM: Okay. Let me make a couple of presentations.

Thank you. Thank you.

Okay. We have two departing panel members. Today actually we have four, but two that are with us. The others have already departed or didn't make it today. Those are Sack Johannesmeyer and Kris Nielsen and his --

VOICE: They're still on the way.

MR. NAMM: They're still on the way.

(Laughter.)

MR. NAMM: Okay. Anybody want to stay after school? They may show up.

But let me make these two presentations. The first is to Rod Ceasar from the AGC.

Rod, why don't you come on up. And the certificate says in recognition of your leadership and significant contributions to the Bureau of Overseas Building Operations' mission of providing more secure

and more functional facilities for the conduct of U.S. diplomacy and the promotion of U.S. interests worldwide. And in addition to the certificate, we've got the Building Diplomacy book by Elizabeth Gill Lui.

Rod, thank you very much for your service.

(Applause.)

MR. NAMM: And Rod -- for Rod and I, it's about 9:30 at night in Sarajevo.

So we're somewhere between time zones, Rod.

And then to Stuart Sokoloff.

Stuart, we hardly knew you.

MR. SOKOLOFF: (Unintelligible.)

(Laughter.)

MR. NAMM: Well, this is what they tell me. You missed the first one.

MR. SOKOLOFF: Do I get the book in Chinese?

(Laughter.)

MR. NAMM: For a small fee, we will arrange to have the book translated into Chinese. So, Stuart,

a certificate for you, please. Thank you very much.

MR. SOKOLOFF: Thank you.

(Applause.)

MR. NAMM: And we will see everybody in April. And you'll all be waiting with bated breath to hear what we've come up with on design excellence. I'm putting Lydia on the spot, but not until April.

And have good holidays and stay warm in the winter and we'll see you in the spring. Thank you very much.

(Whereupon, at 3:20 p.m., the above-entitled meeting was concluded.)

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CERTIFICATE OF NOTARY

I, CHRIS HOFER, CVR, the officer before whom the foregoing testimony was taken, do hereby certify that the testimony of said parties was taken by me by stenomask means and thereafter reduced to typewriting by me or under my direction; that said testimony is a true record of the testimony given by said parties; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this testimony is taken; and, further, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of the action.

This certification is expressly withdrawn and denied upon the disassembly or photocopying of the foregoing transcript of the proceedings or any part thereof, including exhibits, unless said disassembly or photocopying is done by the undersigned court reporter and/or under the auspices of Hunt Reporting

Company, and the signature and original seal is attached thereto.

_____
CHRIS HOFER, CVR
Notary Public in and for
the State of Maryland

My Commission Expires:

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